DOCUMENT RESUME

ED 094 096 UD 014 476

AUTHOR	Felice, Lawrence G.
TITLE	The Effects of School Desegregation on Minority Group Student Achievement and Self-Concept: An Evaluation of Court Ordered Busing in Waco, Texas. Final Report.
INSTITUTION	Research Development Foundation, Waco, Tex.
SPONS AGENCY	National Center for Educational Research and Development (DHEW/OE), Washington, D.C. Regional Research Program.
BUREAU NO	BR-2-F-080-FR
PUB DATE	Jun 74
CONTRACT	OEC-6-72-0739(509)
NOTE	221p.
EDRS PRICE	MF-$0.75 HC-$10.20 PLUS POSTAGE
DESCRIPTORS	*Academic Achievement; Community Attitudes; *Integration Effects; Integration Methods; Longitudinal Studies; Minority Group Children; Parent Attitudes; Program Evaluation; *School Integration; *Self Concept; Student Attitudes; Student Transportation; Teacher Attitudes; Urban Education
IDENTIFIERS	*Texas

ABSTRACT

The purpose of this study is to evaluate the effects of busing on the subsequent achievement performance of bused minority students. Differences in achievement gains are hypothesized to be a function of bused student attitudes toward busing and the interracial climate of acceptance in the receiving schools. The design of this study is that of a three year longitudinal panel with before busing and after busing achievement and attitudinal measures for bused and non-bused black students, and white receiving school students and teachers in Waco, Texas. Independent variables included in the analyses include measured intelligence, parental authority structure, educational expectations, self-concept, racial prejudice, integration attitudes, busing attitudes, school socio-economic climate and two measures of school interracial climate. Findings reveal the achievement performance of bused black students declined significantly from that of non-bused blacks. While all minority students had lower achievement scores after two years of busing, school interracial climate and the attitudes of bused students accounted for the significantly lower scores of bused students. The major conclusion is that rapid school desegregation in communities with great resistance to busing erodes student achievement performance. (Author/JM)

ED 094096

SCOPE OF INTEREST NOTICE
The ERIC Facility has assigned this document for processing to: UD

In our judgement, this document is also of interest to the clearinghouses noted to the right. Indexing should reflect their special points of view.

CG

Final Report

Project No. 2F080
Contract No. OEC-6-72-0739-(509)

BEST COPY AVAILABLE

Lawrence G. Felice
Research Development Foundation
P. O. Box 8161
Waco, Texas 76703

THE EFFECTS OF SCHOOL DESEGREGATION ON MINORITY GROUP STUDENT ACHIEVEMENT AND SELF-CONCEPT: AN EVALUATION OF COURT ORDERED BUSING IN WACO, TEXAS

June, 1974

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Office of Education

National Center for Educational Research and Development
(Regional Research Program)

UD 014470

Abstract

The purpose of this study is to evaluate the effects of busing on the subsequent achievement performance of bused minority students. Differences in achievement gains are hypothesized to be a function of bused student attitudes toward busing and the interracial climate of acceptance in the receiving schools. The design of this study is that of a three year longitudinal panel with before busing and after busing achievement and attitudinal measures for bused and non-bused black students, and white receiving school students and teachers in Waco, Texas. Independent variables included in the tabular, correlation and regression analyses include measured intelligence, parental authority structure, educational expectations, self-concept, racial prejudice, integration attitudes, busing attitudes, school socio-economic climate and two measures of school interracial climate. Findings reveal the achievement performance of bused black students declined significantly from that of non-bused blacks. While all minority students had lower achievement scores after two years of busing, school interracial climate and the attitudes of bused students accounted for the significantly lower scores of bused students. The major conclusion of the study is that rapid school desegregation in communities with great resistance to busing erodes bused student achievement performance.

ED 094096

Final Report

Project No. 2F080
Contract No. OEC-6-72-0739-(509)

THE EFFECTS OF SCHOOL DESEGREGATION ON MINORITY GROUP STUDENT ACHIEVEMENT AND SELF-CONCEPT: AN EVALUATION OF COURT ORDERED BUSING IN WACO, TEXAS

Lawrence G. Felice
Research Development Foundation
Waco, Texas 76703

June, 1974

The research reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
National Center for Educational Research and Development

TABLE OF CONTENTS

TABLE OF CONTENTS ii

LIST OF TABLES iv

I. RESEARCH PROBLEM AND OBJECTIVES

A. Research Problem 1
B. Research Objectives 4

II. DESIGN AND PROCEDURES

A. Design and Sample 6
B. Procedures and Methodology 7

III. ACHIEVEMENT LEVEL DIFFERENCES

A. Achievement Differences Prior to Busing 10
B. Achievement Differences After Busing . . . 14

IV. ATTITUDES TOWARD BUSING AND INTERRACIAL ACCEPTANCE IN WACO SCHOOLS

A. Attitudes of Bused Black Students 23
   1. Attitudes Toward Busing 23
   2. Attitudes Toward Classroom Compositional Factors 39
   3. Attitudes Toward Integration 48
B. Attitudes of White Receiving Students . . 53
C. Attitudes of Receiving School Teachers . . 62
D. School Climates of Interracial Acceptance. 76

V. DETERMINANTS OF MINORITY STUDENT ACHIEVEMENT PERFORMANCE

A. Bused Student Achievement 81
B. Non-Bused Student Achievement 86
C. Self-Concept and Measured Intelligence . . 90
D. Selected Determinants of Achievement . . . 93

VI. SUMMARY AND CONCLUSIONS

A. Achievement Score Change 99
B. Student and Teacher Attitudes 100
C. Determinants of Achievement 102

BIBLIOGRAPHY 105

APPENDIX A. OPERATIONAL DEFINITIONS OF SELECTED VARIABLES 110

APPENDIX B. MEANS, STANDARD DEVIATIONS AND PERCENTAGES OF VARIABLES. 115

APPENDIX C. QUESTIONNAIRE FOR FIRST WAVE OF DATA COLLECTION, SPRING, 1971 117

APPENDIX D. QUESTIONNAIRES FOR SECOND WAVE OF DATA COLLECTION, SPRING, 1972 125

APPENDIX E. QUESTIONNAIRE FOR THIRD WAVE OF DATA COLLECTION, SPRING, 1973 154

APPENDIX F. INTERCORRELATION MATRICES FOR SELECTED VARIABLES FOR BUSED AND NON-BUSED MINORITY STUDENTS 164

LIST OF TABLES

TABLE PAGE

1. School Grade By Busing Status 8
2. Age and Sex Distribution By Busing Status 8
3. Mean Scores Intermediate Form, California Achievement Test, Prior To Busing. 11
4. Total Math Scores, Prior To Busing, By Respondent's Busing Status 12
5. Total Reading Scores, Prior To Busing, By Respondent's Busing Status 13
6. Total Battery Scores, Prior To Busing, By Respondent's Busing Status 13
7. Mean Scores Advanced Form, California Achievement Test 14
8. Total Math Scores, After Busing, By Respondent's Busing Status 15
9. Total Reading Scores, After Busing, By Respondent's Busing Status 16
10. Total Battery Scores, After Busing, By Respondent's Busing Status 16
11. Average Decline in Achievement By Busing Status . 17
12. Achievement Test Performance By Respondent's Measured I.Q. 18
13. Achievement Test Scores, After Busing, By Respondent's Busing Status, Controlled for Measured I.Q. 19
14. Achievement Test Score Changes By Respondent's Measured I.Q. 20
15. Achievement Test Score Changes By Respondent's Busing Status, Controlled for Measured I.Q. . . 21
16. Attitude Toward Busing By Respondent's Busing Status 24
17. Perceived Advantages of Busing By Attitude Toward Busing 26
18. Perceived Disadvantages of Busing By Attitude Toward Busing 27
19. Friend's Attitudes Toward Busing By Respondent's Busing Status 28
20. Parents' Attitudes Toward Busing By Respondent's Busing Status 29
21. Evaluation of Busing Advantages By Respondent's Busing Status 30
22. Busing For Effective School Integration By Respondent's Busing Status 31

TABLE PAGE

23. Favor Busing To School Outside Neighborhood By Respondent's Busing Status. 32
24. Busing Risks To Student Health By Respondent's Busing Status. 34
25. Busing And The Learning Process By Respondent's Busing Status 35
26. Busing Versus Substandard School Upgrading By Respondent's Busing Status 36
27. Busing Versus Relocation of Quality Teachers By Respondent's Busing Status. 37
28. Parental Appraisal of School By Respondent's Busing Status 38
29. Desired Number of White Students By Respondent's Busing Status 40
30. Desired Number of White Teachers By Respondent's Busing Status 41
31. Desired School Racial Mix By Respondent's Busing Status 43
32. Teacher Patience And Race By Respondent's Busing Status 44
33. Teacher's Race and Subject Stimulation By Respondent's Busing Status 45
34. Perceived Teacher Interest By Respondent's Busing Status 46
35. Perceived Student Brightness in Comparison With Others By Respondent's Busing Status . . . 47
36. Desirability of School Integration By Respondent's Busing Status 49
37. Minority Student Educational Attainment And School Integration By Respondent's Busing Status 50
38. General Integration Attitudes By Respondent's Busing Status 51
39. Perceived Racial Prejudice By Respondent's Busing Status 52
40. Desired Number of Whites in School By Race of Respondent and Receiving School Status . . . 54
41. Desired Number of White Teachers in School by Race of Respondent and Receiving School Status 55
42. Perception of Teacher Interest By Race of Respondent and Receiving School Status 57
43. Perception of Racial Prejudice By Race of Respondent and Receiving School Status 58
44. Integration Attitudes By Race of Respondent and Receiving School Status. 60
45. Attitudes Toward Busing By Race of Respondent and Receiving School Status. 61
46. Characteristics of Waco Independent School District Teachers 63
47. Racial Composition of Teacher's Classes By Teachers Receiving School Status 64

TABLE PAGE

48. Teacher's Race By Teachers Receiving School Status 65
49. Teacher's Views of School Administration Leadership By Teachers Receiving School Status . 66
50. Teacher's Views of Staff Cooperation By Teachers Receiving School Status 67
51. Best Predictor of Student Success By Teachers Receiving School Status 68
52. Teacher's Choice of School Socio-Economic Setting By Teachers Receiving School Status. . . 69
53. Teacher's Choice of School Ethnic Composition By Teachers Receiving School Status. 70
54. Teacher's Choice of School Racial Composition By Teachers Receiving School Status. 71
55. Teacher's Perceptions of Racial and Ethnic Cooperation By Teachers Receiving School Status. 73
56. Teacher's Choice of School Busing Policy By Teachers Receiving School Status 74
57. Teacher Ratings of Minority Student Academic Ability By Teachers Receiving School Status. . . 75
58. Teacher Ratings of Minority Student Effort By Teachers Receiving School Status 77
59. Index Scores For School Interracial Climate By Teachers Receiving School Status 78
60. Minority Student Perceptions of School Interracial Climate By Respondent's Busing Status . . 80
61. Multiple Regression Equations For Achievement Performance Variables For Bused Minority Students 82
62. Multiple Regression Equations For Achievement Performance Variables For Non-Bused Minority Students 88
63. Multiple Regression Equations For Self-Concept and Measured Intelligence of Bused And Non-Bused Minority Students 91
64. Direct and Indirect Effects on Achievement Test Variables For Bused Minority Students,1973 . . . 94
65. Direct And Indirect Effects on Changes in Achievement Scores For Bused Minority Students . 97

BEST COPY AVAILABLE

CHAPTER I

RESEARCH PROBLEM AND OBJECTIVES

A. Research Problem

While a variety of studies have indicated school desegregation has a positive effect on minority group student achievement[1] and recent Supreme Court decisions[2] have extended the use of busing to desegregate public schools and achieve racial balance, the results of the few studies conducted to evaluate the effects of busing on minority group student achievement are contradictory and inconclusive.[3] An answer to the question of whether busing is the best or even an appropriate means to achieve an equal educational opportunity for all, remains elusive and unanswered. The research outlined in this proposal is designed to evaluate the effects of busing for minority group student achievement. The major theoretical orientation guiding this study is that the utilization of busing as a technique to desegregate school facilities has a variable effect on minority group student achievement, due to motivational differences associated with student attitudes toward busing and the social-emotional, normative climate of receiving schools. Specifically, this research seeks to provide a resolution of the contradictory findings concerning the effects of busing on minority group student achievement by an analysis of the contribution of the intervening variable of student attitudes and self-concept.

Major national interest in educational inequality arose with the publication of findings from the Office of Education's

---

[1] See, for example, Katz, 1964; McPartland, 1967; U.S. Commission on Civil Rights, 1967; Armor, 1969; Pritchard, 1969; Office of Civil Rights, H.E.W., 1970; Pettigrew, 1971; St. John and Lewis, 1971.

[2] See *Swann v. Charlotte-Mecklenburg Board of Education*, 91 S. Ct. 1267 (1971); and the discussion of recent decisions in *Inequality in Education*, No. 10, 1971: pp. 3-6.

[3] See, for example, Weinberg's (1970:82-85) discussion of studies on the effects of busing.

Educational Survey, commissioned by the Civil Rights Act of 1964; findings which revealed lower achievement levels for the children of racial and ethnic minority groups. In general, the major findings of the original analysis (Coleman, 1966) and secondary analysis (U.S. Commission on Civil Rights, 1967) point to the importance of the social context of the school, i.e., the socio-economic and racial-ethnic composition of the student body, for the explanation of differences in achievement. Since 1964, this nation has strengthened its commitment to provide an equal educational opportunity for all of its citizens. While there is virtual unanimity that such a goal is appropriate and worthwhile, there are serious differences as to the precise nature of this goal (Coleman, 1968:7-23) and as to the best strategy to achieve this goal (Day, 1968; McDill, 1969).

Agreeing with findings of several studies (Goodman, 1959; Wilson, 1959; Michael, 1961; Turner, 1964; Boyle, 1966) the Office of Education Report (Coleman, 1966) concludes that socio-economic composition of the schools' student body exerts the largest effect on student achievement scores. The reanalysis of the survey data by McPartland and York (U.S. Commission on Civil Rights, 1967) concludes that regardless of social class, achievement scores of Negro students are higher as the proportion of whites in the school increases. This finding agrees with previous studies (Katz, 1964) and has been substantiated in more recent research (Armor, 1969; Pritchard, 1969; St. John and Lewis, 1971). While Weinberg (1970:294,304) notes a basic inconsistancy between the major conclusions of the two federally sponsored reports, Pettigrew (1971:62) concludes they are significantly related, due to evidence in the Coleman Report that only one fourth of the Negro population may appropriately be classified as "middle class." The relevance of these studies for government policy decisions is evident in Elliot Richardson's statement that racial balance in schools will improve educational opportunity and achievement for minorities (Richardson, 1970:52). With the Supreme Court's Swann decision and the utilization of busing to enforce the decision (Pottinger, 1971:6), one would expect to find achievement differences decreasing between majority and minority group students as educational opportunities are equalized.

The few studies which have been completed on the effects of busing offer contradictory and inconclusive findings. Banks and DiPasquale (1969) and Wood (1969) report bused minority students have greater interest in school and more favorable attitudes toward majority students than non-bused minority students. Moderate increases in achievement scores of bused Negro students are reported in studies conducted in East Harlem and Syracuse (East Harlem Project and City Commission on Human Rights, 1962; City School District-Syracuse, 1967). In addition to positive effects for bused minority students, Scudder and Jurs (1971) find there are no negative effects due to busing for the achievement of majority students in receiving schools. Contradictory findings are reported by Teele, Jackson and Mayo (1966:297) and Moorefield (1967:145-146), with bused minority group students showing no increases in achievement in comparison with their non-bused counterparts. Gardner (1970) reports similar findings for Negro students in a parochial school busing program in Chicago. Reporting on both cross-sectional and longitudinal analyses of Riverside, California school data, Purl and Dawson (1971:3) find low and average achieving bused students achieve less in desegregated schools than in previously segregated schools. Only high achieving bused students achieved more in desegregated settings although this increase was not large enough to reduce the gap between majority and minority group student achievement levels. Purl and Dawson (1971:2) conclude that the achievement gap between bused and non-bused students is at least as high in 1970 as in 1966.

Part of the reason for these contradictory findings is suggested by Katz (1964) and concerns the motivational dimension. Katz maintains that psychological stress and anxiety experienced by Negros in competition with whites may retard or impair achievement motivation among those Negros with poor self-concepts. Of course, the question of whether there is a greater incidence of negative self-concept among Negros as among whites is debatable. Hodgkins and Stakenas (1969) conclude social class accounts for almost all of the differences in self-concept between the races. If the majority of the Negro population cannot be characterized as "middle class" (as suggested by Coleman, et. al., 1966) self-concept may be quite important in the explanation of achievement differences. This is confirmed by Katz (1968:59) who reports low achievers among minority group students have more negative self-concepts and self-evaluation. A similar conclusion is reached in the Coleman Report (1966:323-324) in which the student's sense of control of his environment (an aspect of self-concept) is positively associated with achievement score.

In addition to individual psychological differences with respect to self-concept, differences in social context are also important for the explanation of minority group student achievement. Interactionist theory suggests the responses of others are an important influence in shaping and modifying self-concept (Newcomb, 1950). The socioeconomic and racial-ethnic composition of the student body of a school constitute important educational social contexts. Coleman (1966:303-304) suggests higher educational aspirations of the student body in "middle class" schools serves to increase the level of achievement of minority group students in such schools. In a review of literature on the effects of integration on academic performance of Negros, Katz (1964) suggests integrated schools may provide new comparison levels for Negro self-evaluation. The acceptance or rejection of minority students by majority students, however, may provide support or interference for minority student motivation to achieve (Katz, 1964). Pettigrew (1971:73-74) suggests the opportunity for cross-racial evaluation in desegregated schools leads to advances in achievement only if such comparisons occur in contexts which reflect majority student acceptance. Both the concepts of school "socio-economic" and "racial-ethnic" climate, utilize student self-concept and motivation to link structural compositional factors to individual achievement.

The degree of acceptance or rejection experienced by non-white bused students, as well as bused student attitudes toward receiving schools are conceptualized as crucial components of the normative climate of the receiving schools. This dimension is reflected in Pettigrew's (1971:63) concern to distinguish between desegregated and integrated school facilities. Whereas desegregation refers to the quantitative dimension of racial composition, integration refers to the qualitative dimension of interracial contact and the degree of mutual cooperation among student body and staff. Integrated schools in which interracial acceptance and cooperation has developed over time, are held to be conducive to raising minority student achievement. Desegregated schools, in which desegregation occurs abruptly, as with court ordered busing, may be non-effective for this purpose. In Moorefield's (1967) study of busing in Kansas City (in which no achievement gains were found), three fourths of the bused students were given low ratings on an acceptance scale by receiving students (Moorefield, 1967:167). In addition, two thirds of the bused students were regarded as "aggressive" by receiving students. Lower self-concept scores were observed among bused Negro students in schools in which acceptance by white receiving students was also low (Moorefield, 1967:166). Purl and Dawson (1971:18) suggest that the lack of increase in achievement among bused students in Riverside, California, was due to the lack of programs in desegregated schools to provide for a smooth transition of bused students to the new school's social structure. Whether the effect of busing is positive or negative for minority student achievement is hypothesized to be a function of the attitudes of the bused student toward busing and the new school, as well as the normative climate of acceptance or rejection communicated by the receiving school's students and staff; with whom he interacts.

B. Research Objectives

1. To ascertain whether court ordered busing of minority group students to achieve racial balance in public schools in Waco, Texas, leads to increases in level

of achievement for bused minority group students compared with non-bused minority students.

2. To determine majority and minority group student attitudes toward busing and the degree of interracial acceptance in Waco schools.

3. To evaluate the degree to which bused student attitudes and self-concept, and the normative climate of acceptance of receiving schools account for subsequent achievement performance of bused minority group students.

CHAPTER II

DESIGN AND PROCEDURES

A. Design and Sample

The overall design is that of a three year longitudinal panel, although this design is one that emerged during the study and was not originally planned. The first and original wave of data collection in the spring of 1971, was conceived as a simple cross-sectional, *ex post facto* design to study the determinants of majority and minority student achievement levels and dropout rates. This original study was funded by a grant from the Cooper Foundation in Waco, Texas. The sample consisted of a random sample of 860 7th to 12th grade students in Waco public schools, stratified to insure adequate representation of grade levels, schools, and racial and ethnic minority groups. The racial/ethnic breakdown of the sample was 369 anglos, 295 blacks and 196 Mexican Americans. In addition to I.Q. scores, achievement test scores, self-concept and achievement value orientation scores, and routine demographic information collected from school records and a survey, aggregative measures for each school's normative and socioeconomic climates were derived. The questionnaire for this wave is found in Appendix C.

During the summer of 1971, federal courts ordered the Waco Independent School District to bus 1,600 black students to previously all white schools to create a more favorable racial balance. Approximately 125 black students from the original sample were to be bused. The "before" measures on achievement, self-concept and school climates, indicated a potential for research seldom available to social scientists. Thus, a proposal for Office of Education support was formulated. Due to the passage of time required for proposal acceptance, contract negotiations and instrument clearance, it was decided to conduct a second year of data collection with local support and request Office of Education funding for a third year of data collection and the final analysis. Notification from the Office of Education about the grant was received during the second year of the study.

Data for the second wave were collected in the spring of 1972 from two separate samples of respondents. To provide for the longitudinal aspects of this study, 240 black students from the original smaple (105 of the 240 are bused students) were resurveyed to provide a second measure of self-concept and integration attitudes. In addition measures on attitudes toward busing and interracial association from the Equality of Educational Opportunity Survey (1964) were included. The separate questionnaires for bused and non-bused black students for the Spring of 1972, Form A and Form B, are found in Appendix D. The second sample of respondents consisted of a random, corss-section of students and teachers from each school. Data from this sample were used to construct aggregative measures of school educational, normative and socio-economic climates. Students were surveyed with the above mentioned 1972 questionnaire, Form A, found in Appendix D. Teachers were surveyed with 1972 questionnaire, Form C, found in Appendix D.

Data for the third and final wave are composed of two types. The first type consists of 55 bused and 62 non-bused black students from the original sample. The remainder of those surveyed in 1971 and 1972 had either dropped out, transferred or graduated. This first group of 117 were retested with the California Achievement Test and resurveyed (for the third time) with the 1973 questionnaire, Form D, found in Appendix E. The second type of data consists of a random, cross-section of students from each school, surveyed with the 1972 questionnaire, Form A to provide for the construction of additional aggregate measures of school educational and socio-economic climates. While a complete printout of responses to all questionnaire items was not deemed necessary to meet the objectives of this study, such data are available, on request, from the principal investigator.

Routine demographic information about the bused and non-bused black students who were followed through the entire three year period, and who provide the sample upon which the results and conclusions of this study are based, are presented in Tables 1 and 2.

B. Procedures and Methodology

Operational definitions of critical variables and concepts as well as procedures used in the construction of indices are found in Appendix A. Differing strategies of analysis are used for the three different objectives of this research. Tabular analysis with appropriate tests of statistical significance are utilized to ascertain whether court ordered busing leads to increases in achievement for bused minority students. A similar methodology is used for the second research objective; to determine the degree of interracial acceptance in Waco schools and to determine majority and minority student attitudes toward busing.

TABLE 1 SCHOOL GRADE BY BUSING STATUS

Busing Status	School Grade 10th	 11th	 12th	 Total
Bused Students	22 42%	15 28%	16 30%	53 100%
Non-Bused Students	20 32%	16 26%	26 42%	62 100%
Total	42 37%	31 27%	42 36%	115* 100%

*2 Observations Missing

TABLE 2 AGE AND SEX DISTRIBUTION BY BUSING STATUS

Busing Status	Sex	Age 15 or Younger	 16	 17	 18 or Older	Total
Bused Students	Male	12	11	4	3	30
	Female	5	7	10	1	23
Non-Bused Students	Male	6	12	4	2	24
	Female	7	14	15	3	39
Total	Male	18	23	8	5	54
	Female	12	21	25	4	62
Total		30	44	33	9	116*

*1 Observation Missing

For the third and final research objective, correlation and multiple regression techniques are used since they provide for a more powerful evaluation of complex relationships, are more appropriate for causal analysis and permit the relative effects of contextual and individual factors to be weighed with all other independent variables controlled. Dummy variable techniques (Suits, 1957) are used for non-interval scale variables and dichotomous variables (Boyle, 1966; Coleman, 1970; and Lyons, 1971). Regression analysis is used to identify those variables contributing the largest amount of variance to the dependent variables of student achievement. In addition, path coefficients (McDill, Myers and Rigby, 1967; Blalock, 1968; Borgatta, 1969; Land, 1969; Lyons, 1971) are used to select those factors which have the most direct effects upon achievement scores.

CHAPTER III

ACHIEVEMENT LEVEL DIFFERENCES

The results of this study are presented in three chapters, corresponding to the three research objectives specified in Chapter I. The first objective, considered in this chapter, is to ascertain whether court-ordered busing of minority students to achieve racial balance is beneficial to those students who are bused. Specifically, the question is whether bused minority students show increases in achievement performance compared with their non-bused peers. Measures used for achievement in this study are standardized scores for total math, total reading and total battery from the Intermediate and Advanced Forms of the California Achievement Test.

A. Achievement Differences Prior To Busing

The Intermediate Form of the CAT was administered by Waco Independent School District personnel as part of normal school testing procedures and was given at least one year prior to the court's busing order. Differences in achievement scores between bused students and non-bused students, prior to busing, are presented in Table 3. While one would not expect large differences in achievement scores if students had been randomly selected for busing assignment and T-tests reveal differences are not statistically significant, non-random assignment policies exercised an obvious effect, with bused student achievement scores being consistantly lower. Tables 4 through 6 present the same information in a slightly different form, with achievement scores separated into high and low score categories and with a chi square test of statistical significance performed. None of the differences in achievement scores between bused and non-bused students, prior to actual busing, are statistically significant. Thus, while there is a trend for bused students, prior to busing, to have lower measured achievement scores than their non-bused peers, these differences are concluded to be statistically insignificant and substantially inconsequential.

TABLE 3 MEAN SCORES INTERMEDIATE FORM, CALIFORNIA ACHIEVEMENT TEST, PRIOR TO BUSING

Busing Status	Statistic	Total Math Score	Total Reading Score	Total Battery Score
Bused Students	Mean	74.89	81.96	250.85
	Standard Deviation	5.59	7.26	12.37
Non-Bused Students	Mean	77.95	84.03	255.98
	Standard Deviation	16.02	13.65	27.99
Total Sample	Mean	76.54	83.07	253.62
	Standard Deviation	12.40	11.17	22.26
T-Test Significance =		.265	.320	.215

TABLE 4 TOTAL MATH SCORES, PRIOR TO BUSING, BY RESPONDENT'S BUSING STATUS

	Score Categories*				
Busing Status	Low	Below Average	Above Average	High	Total
Bused Students	16%	35%	36%	13%	100% (55)
Non-Bused Students	10%	48%	21%	21%	100% (62)
Total	13%	42%	28%	17%	100% (117)

Chi Square = 5.15 With 3 D.F. Significance = .1574

*Score Categories in this and Tables 5 through 10 were derived according to the following procedures
Low = From -1 to -3 standard deviations from the mean of the combined distribution; Below average = -1 S.D.; Above average = +1 S.D.; High = From +1 to +3 standard deviations.

TABLE 5 TOTAL READING SCORES, PRIOR TO BUSING BY RESPONDENT'S BUSING STATUS

		Score Categories			
Busing Status	Low	Below Average	Above Average	High	Total
Bused Students	15%	49%	25%	11%	100% (55)
Non-Bused Students	11%	34%	31%	15%	100% (62)
Total	13%	41%	28%	18%	100% (117)

Chi Square = 5.030 With 3 D.F. Significance = .1696

TABLE 6 TOTAL BATTERY SCORES, PRIOR TO BUSING, BY RESPONDENT'S BUSING STATUS

		Score Categories			
Busing Status	Low	Below Average	Above Average	High	Total
Bused Students	24%	33%	33%	10%	100% (55)
Non-Bused Students	10%	45%	26%	19%	100% (62)
Total	16%	39%	29%	16%	100% (117)

Chi Square = 6.02 With 3 D.F. Significance = .1243

B. Achievement Differences After Busing

Turning attention to differences in achievement after busing, Table 7 presents achievement scores for both bused and non-bused groups on the Advanced Form of the California Achievement Test, which was administered by a research consultant during 1973, almost two years after court ordered busing was in progress.

TABLE 7 MEAN SCORES ADVANCED FORM, CALIFORNIA ACHIEVEMENT TEST, AFTER BUSING

Busing Status	Statistic	Total Math Scores	Total Reading Scores	Total Battery Scores
Bused Students	Mean	60.96	50.77	200.68
	Standard Deviation	21.96	15.15	55.06
Non-Bused Students	Mean	65.73	58.59	233.95
	Standard Deviation	23.77	19.54	63.28
Total	Mean	63.53	54.89	213.21
	Standard Deviation	22.98	18.03	60.51
T-Test Significance =		.184	.016	.038

Differences in mean achievement scores are noted between the bused and non-bused groups of black students, with bused students having significantly lower scores than non-bused students. Two general observations are in order before moving on to the detailed tables and other statistical tests. First, all groups of test scores have declined by the end of the study period as compared with scores at the beginning (Table 3). Comparing the row totals from Tables 3 and 7 reveals that the total sample has declined in achievement relative to their earlier position. Whereas the mean score for the total CAT battery was 253.62 at the beginning of the study, the mean at the conclusion is 213.21. Both bused and non-bused black students have lost ground in the 2 to 3 years between CAT tests. Relative to their white peers, who form the majority on whom such tests are standardized, black students in this study achieve relatively less, the longer they are in school. This might be due to specific school and/or community conditions in Waco, but probably reflects trends observed nationally. The second observation to be made from Table 7 is that differences in achievement levels have widened between the bused and non-bused groups. Whereas only 5 percentage points separate the mean total battery scores for the two groups prior to busing (as depicted in Table 3), a 33 percentage point difference is observed between these groups after the period of busing (Table 7). While all black students in this sample have lost ground with respect to their achievement performance, bused students have lost the most.

Separating achievement scores into standard deviation categories, the relationship between busing status and level of achievement is examined in detail for the various tests, in Tables 8 through 10.

TABLE 8 TOTAL MATH SCORES, AFTER BUSING, BY RESPONDENT'S BUSING STATUS

	Score Categories				
Busing Status	Low	Below Average	Above Average	High	Total
Bused Students	5%	89%	4%	2%	100% (55)
Non-Bused Students	18%	53%	18%	11%	100% (62)
Total	12%	70%	8%	10%	100% (117)

Chi Square = 18.452 With 3 D.F. Significance = .0004

TABLE 9 TOTAL READING SCORES, AFTER BUSING BY RESPONDENT'S BUSING STATUS

	Score Categories				
Busing Status	Low	Below Average	Above Average	High	Total
Bused Students	5%	87%	5%	3%	100% (55)
Non-Bused Students	15%	50%	20%	15%	100% (62)
Total	10%	68%	13%	9%	100% (117)

Chi Square = 19.071 With 3 D.F. Significance = .0003

TABLE 10 TOTAL BATTERY SCORES AFTER BUSING, BY RESPONDENT'S BUSING STATUS

	Score Categories				
Busing Status	Low	Below Average	Above Average	High	Total
Bused Students	4%	89%	5%	2%	100% (55)
Non-Bused Students	15%	53%	15%	17%	100% (62)
Total	10%	70%	10%	10%	100% (117)

Chi Square = 18.557 With 3 D.F. Significance = .0003

Inspection of Tables 8 through 10 reveals statistically significant differences in score distribution between bused and non-bused students for all three measures of achievement. Bused students achieve significantly less than their non-bused peers on all three achievement measures. The extent of the decline in achievement is detailed in Table 11.

TABLE 11 AVERAGE DECLINE IN ACHIEVEMENT BY BUSING STATUS

Busing Status	Statistic	Total Math Score	Total Reading Score	Total Battery Score
Bused Students	Mean	-14.19	-31.39	-51.12
	Standard Deviation	21.38	14.27	52.73
Non-Bused Students	Mean	-12.62	-26.28	-32.55
	Standard Deviation	18.29	16.69	51.45
Total Sample	Mean	-13.35	-28.68	-41.10
	Standard Deviation	19.72	15.74	52.64
T-Test Significance =		.174	.062	.049

While it is not the intention to analyze the determinants of these differences in achievement in this section, it appeared appropriate to investigate whether certain select variables were also significantly related to achievement differences, and in particular, to the differences between bused and non-bused students. Variables included in this early pre-analysis are the sex, age and grade of the respondent, measured I.Q., and parental socio-economic status. Of all of these variables, only one is significantly related to achievement performance; measured I.Q. None of the achievement differences between sex, age, grade, parental socio-economic status and any of the three sets of achievement test scores are statistically significant. The relationship between measured I.Q. and achievement test performance is presented in Table 12.

TABLE 12 ACHIEVEMENT TEST PERFORMANCE BY RESPONDENT'S MEASURED I.Q.

Measured I.Q.	Achievement Test Scores		
	Total Math	Total Reading	Total Battery
High (Above Median)	76.59	64.51	249.68
Low (Below Median)	52.45	47.45	184.71
T-Test Significance =	.041	.000	.004

All T-Test scores are statistically significant, revealing that students with higher levels of measured intelligence achieve significantly higher on all three CAT measures.

The question of whether I.Q. accounts for all of the difference in achievement scores between bused and non-bused black students is addressed next. Table 13 presents data for this relationship. Significant differences in achievement performance of bused and non-bused students persist (with the exception of math differences among lower I.Q. students) with measured intelligence controlled. The magnitude of mean achievement score differences between high and low I.Q. students is larger than mean achievement score differences between bused and non-bused students. Obviously, I.Q. is a major determinant of achievement. Even with I.Q. controlled, however, significant achievement differences between bused and non-bused students remain.

In addition to investigating the relationship of the previously mentioned selected variables with 1973 Achievement Test scores, the question of whether such variables are related to achievement score changes needs to be considered. This question is slightly different than the previous one, since the change in achievement (positive or negative from the CAT given prior to busing, to the CAT given after busing)

TABLE 13 ACHIEVEMENT TEST SCORES AFTER BUSING BY RESPONDENT'S BUSING STATUS CONTROLLED FOR MEASURED I.Q.

Busing Status	Measured I.Q.					
	High (Above Mean) California Achievement Test			Low (Below Mean) California Achievement Test		
	Total Math	Total Reading	Total Battery	Total Math	Total Reading	Total Battery
Bused Students	73.22	59.06	231.06	53.18*	43.72	178.63
Non-Bused Students	78.69	67.89	261.24	51.85*	50.47	189.66
Total	76.59	64.51	249.68	52.45	47.45	184.71

T-tests for all comparisons except *, Significance = Beyond .05

is the dependent variable here. Table 14 presents the relationship between measured intelligence and changes in achievement test scores.

TABLE 14 ACHIEVEMENT TEST SCORE CHANGES
BY RESPONDENT'S MEASURED I.Q.

Measured I.Q.	Achievement Score Changes		
	Math	Reading	Battery
High	- 4.84	-23.20	-12.54
Low	-19.96	-33.18	-62.33
T-Test Significance =	.000	.003	.000

Measured I.Q. is significantly related to changes in respondents' achievement test scores. As expected, higher I.Q. students have a significantly lower magnitude of loss in achievement than low I.Q. students. Table 15 presents this relationship by the respondents' busing status.

From inspection of Table 15, it is obvious that measured intelligence is a major determinant of changes in achievement performance, and this relationship holds for both bused and non-bused students. Even with I.Q. controlled, however, busing status appears to exert a statistically significant effect on achievement test performance; with non-bused students (with the exception of the changes in math scores) showing a smaller magnitude of loss than bused students. While the correlation and regression analysis of Chapter V will explicate the precise nature of these relationships, it seemed appropriate to present the effect of measured intelligence upon bused and non-bused minority student achievement performance in this section.

Whereas all of the black students in this sample achieved less well after the passage of time between the

TABLE 15 ACHIEVEMENT TEST SCORE CHANGES BY RESPONDENT'S BUSING STATUS CONTROLLED FOR MEASURED I.Q.

Busing Status	Measured I.Q.					
	High (Above Mean) Achievement Score Changes			Low (Below Mean) Achievement Score Changes		
	Math	Reading	Total Battery	Math	Reading	Total Battery
Bused Students	-3.78*	-24.72	-23.72	-19.91*	-36.68	-68.91
Non-Bused Students	-5.56*	-22.19	-5.36	-20.01*	-30.33	-56.96
Total	-4.8	-23.2	-12.54	-19.96	-33.18	-62.33

T-tests for all comparisons except *, Significance = Beyond .05

administrations of the two forms of the California Achievement Test, bused black students exhibit a significantly larger decline in achievement performance than non-bused black students. The major conclusion of this section is that busing black students to previously all white schools to achieve racial balance does not benefit the achievement performance of the bused students. Busing serves to erode achievement performance so that bused black students have significantly poorer achievement than black students not bused. Standard deviations in Table 11 are fairly large, however, indicating some students do much better; others, worse. Chapter V will causally analyze why some students achieve more than others. Suffice it for this chapter to observe the differences in achievement levels and to make the tentative conclusion that busing weakens the achievement performance of black bused students as compared with their non-bused black peers.

CHAPTER IV

ATTITUDES TOWARD BUSING AND INTERRACIAL ACCEPTANCE IN WACO SCHOOLS

The second research objective is to determine majority and minority student attitudes toward busing, and the degree of interracial acceptance in Waco schools. Basic to this objective are answers to questions such as the attitudes of the student body of the receiving school about busing, bused minority students and integration. How do those students who are bused evaluate their busing experiences? Much of the discussion about busing has been clouded in a political smokescreen. The intention of this research objective is to find out what the participants themselves, bused students, receiving white students and teachers think about busing, school desegregation and integration. Findings will be presented in four sections in this chapter; attitudes of bused black students, attitudes of white receiving students, attitudes of receiving school teachers and the degree of interracial acceptance in Waco schools.

A. Attitudes of Bused Black Students

1. Attitudes Toward Busing

The experiences of the bused students are held to be crucial for the development of subsequent achievement. In this section, we report the responses of bused black students to a variety of items relating to their busing experiences. For comparison purposes, the responses of non-bused black students in the sample are included where appropriate. In the following Tables, VAR112 is the respondent's busing status; with a yes signifying the respondent is being bused, a no signifying the respondent is not being bused. Table 16 presents responses to Question 51 from Questionnaire Form D, how do you feel about busing to achieve racial balance in Waco schools. Of bused students only 9% have a positive attitude toward busing, with 35% indicating a negative attitude. Over half of the bused students, 56%, are neutral toward busing. No significant differences are observed between bused and non-bused student responses to this question.

BEST COPY AVAILABLE

TABLE 16 ATTITUDE TOWARD BUSING BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * * *   C R O S S T A B U L A T I O N
   VAR112    BUSING STATUS                                 BY  VAR121
* * * * * * * * * * * * * * * * * * * *   * * * * * * * * * * * * * *
                                          PERSONAL ATTITUDE TO BUSING
                      VAR121              * * * * * * * * * * * * * *
              COUNT  I
            ROW PCT  IPOSITIVE NEUTRAL   NEGATIVE   ROW
            COL PCT  I FEELING           FEEL       TOTAL
            TOT PCT  I    1.00I    2.00I    3.00I
VAR112      ---------I--------I--------I--------I
              1.00   I     5  I    31  I    19  I    55
   YES               I   4.1  I  56.4  I  34.5  I  47.0
                     I  50.0  I  49.2  I  43.2  I
                     I   4.3  I  26.5  I  16.2  I
                    -I--------I--------I--------I
              2.00   I     5  I    32  I    25  I    62
   NO                I   8.1  I  51.6  I  40.3  I  53.0
                     I  50.0  I  50.8  I  56.8  I
                     I   4.3  I  27.4  I  21.4  I
                    -I--------I--------I--------I
             COLUMN       10       63       44       117
              TOTAL      8.5     53.8     37.6     100.0

RAW CHI SQUARE =      .41674 WITH     2 DEGREES OF FREEDOM.
CRAMER#S V =     .05968
CONTINGENCY COEFFICIENT =      .05958
KENDALL#S TAU B =      .05581
KENDALL#S TAU C =      .05903
GAMMA =     .10532
SOMERS#S D =      .05258              SIGNIFICANCE =    .8119
```

Table 17 presents a crosstabulation of bused student attitudes toward busing, with why they consider busing to be advantageous (Question 70, Form D). The predominant category chosen for the reason busing is viewed advantageously is the category of personal reasons. Even 16 students with negative attitudes toward busing generally thought busing provided some personal advantages such as more time to be with friends, and less walking. Only a few thought busing provided them with a better school or helped to integrate Waco schools. Table 18 presents the crosstabulation of bused student attitudes toward busing with their objections to busing (Question 71, Form D). The predominant category again, has to do with personal reasons, such as having to get up earlier, and having to ride noisy and smelly buses, 2 of 73 students objected to busing for racial reasons, indicating they would rather not associate with whites.

Responses to the question of how most of their friends feel about busing (Question 50, Form D) are presented in Table 19. The majority of the friends of both bused (60%) and non-bused (74.2%) black students have negative attitudes toward busing. Interestingly, however, almost twice as many friends of bused students have positive attitudes toward busing compared with the friends of non-bused students. Differences between the two groups are not statistically significant. Table 20 presents the relationship between the respondent's busing status and his or her parents' attitudes toward busing. The parents of bused students tend to have more favorable attitudes toward busing than their bused sons and daughters or the friends of their children. 20% of bused student's parents have positive attitudes toward busing compared with 9.8% of the parents of non-bused students. If one percentages down the columns instead of across the rows allows an interpretation to be made, that two-thirds of the parents with positive attitudes toward busing are those whose children are bused. Chi square statistic reveals, however, that the distribution of responses in the table is not statistically significant from a chance distribution.

Responses to the question of whether the advantages of busing outweigh the disadvantages (Question 48, Form D) are shown in Table 21. While a slight trend indicates a larger proportion of bused students see advantages outweighing disadvantages, differences are small and not significant. Data for whether busing is viewed as the most effective way to achieve school integration (Question 43, Form D) are presented in Table 22. Although differences are not statistically significant, 53% of the bused students agree with this statement, compared with 41% of the non-bused students. Another item which taps attitudes toward busing focuses on the degree to which the respondent favors the use of busing to other than the neighborhood school. Responses to this item (Question 32, Form D) are shown in Table 23. While

BEST COPY AVAILABLE

TABLE 17 PERCEIVED ADVANTAGES OF BUSING BY ATTITUDE TOWARD BUSING

```
                      VAR148
             COUNT   I
             ROW PCT IPERSONAL EDUCATIO RACIAL R PEER    R NO SPECI   ROW
             COL PCT I REASON   NAL REAS EASON     EASON    AL REASO  TOTAL
             TOT PCT I    1.00I    2.00I    3.00I    4.00I    6.00I
VAR120       --------I--------I--------I--------I--------I--------I
                 1.00 I     4  I     0  I     0  I     2  I     0  I     6
  POSITIVE FEELING    I  66.7  I   0.0  I   0.0  I  33.3  I   0.0  I  10.5
                      I  16.0  I   0.0  I   0.0  I  25.0  I   0.0  I
                      I   7.0  I   0.0  I   0.0  I   3.5  I   0.0  I
                     -I--------I--------I--------I--------I--------I
                 2.00 I     5  I     2  I     0  I     3  I     7  I    17
  NEUTRAL             I  29.4  I  11.8  I   0.0  I  17.6  I  41.2  I  29.8
                      I  20.0  I  33.3  I   0.0  I  37.5  I  43.8  I
                      I   8.8  I   3.5  I   0.0  I   5.3  I  12.3  I
                     -I--------I--------I--------I--------I--------I
                 3.00 I    15  I     4  I     2  I     3  I     9  I    34
  NEGATIVE FEEL       I  44.1  I  11.8  I   5.9  I   8.8  I  26.5  I  59.6
                      I  64.0  I  66.7  I 100.0  I  37.5  I  56.3  I
                      I  24.1  I   7.0  I   3.5  I   5.3  I  15.8  I
                     -I--------I--------I--------I--------I--------I
              COLUMN        25        6        2        8       16      57
               TOTAL      43.9     10.5      3.5     14.0     28.1   100.0

RAW CHI SQUARE =      8.82243 WITH     8 DEGREES OF FREEDOM.  SIGNIFICANCE =   .357
CRAMER#S V =       .27819
CONTINGENCY COEFFICIENT =      .36611
KENDALL#S TAU B =     -.03599
KENDALL#S TAU C =     -.03139
GAMMA =     -.05410
SOMERS#S D =     -.03004
```

TABLE 18 PERCEIVED DISADVANTAGES OF BUSING BY ATTITUDE TOWARD BUSING

```
                       VAR109
              COUNT   I
              ROW PCT IPERSONAL EDUCATIO RACIAL R PFER    R NO SPECI   ROW
              COL PCT I REASON  NAL REAS EASON     EASON    AL REASO  TOTAL
              TOT PCT I    1.00I    2.00I    3.00I    4.00I    6.00I
VAR120        --------I--------I--------I--------I--------I--------I
                1.00  I     3  I     0  I     1  I     0  I     0  I      4
 POSITIVE FEELING     I  75.0  I   0.0  I  25.0  I   0.0  I   0.0  I    5.5
                      I   6.4  I   0.0  I   6.3  I   0.0  I   0.0  I
                      I   4.1  I   0.0  I   1.4  I   0.0  I   0.0  I
                     -I--------I--------I--------I--------I--------I
                2.00  I    11  I     1  I     3  I     0  I     1  I     16
 NEUTRAL              I  68.8  I   6.3  I  18.7  I   0.0  I   6.3  I   21.9
                      I  23.4  I  25.0  I  18.7  I   0.0  I  25.0  I
                      I  15.1  I   1.4  I   4.1  I   0.0  I   1.4  I
                     -I--------I--------I--------I--------I--------I
                3.00  I    33  I     3  I    12  I     2  I     3  I     53
 NEGATIVE FEEL        I  62.3  I   5.7  I  22.6  I   3.8  I   5.7  I   72.6
                      I  70.2  I  75.0  I  75.0  I 100.0  I  75.0  I
                      I  45.2  I   4.1  I  16.4  I   2.7  I   4.1  I
                     -I--------I--------I--------I--------I--------I
              COLUMN      47        4       16        2        4       73
              TOTAL     64.4      5.5     21.9      2.7      5.5    100.0

RAW CHI SQUARE =      1.49172 WITH     8 DEGREES OF FREEDOM,  SIGNIFICANCE =   .9928
CRAMER#S V =      .10108
CONTINGENCY COEFFICIENT =      .14151
KENDALL#S TAU B =      .07456
KENDALL#S TAU C =      .05292
GAMMA =      .16434
SOMER#S D =      .05648
NUMBER OF MISSING OBSERVATIONS =        44
```

BEST COPY AVAILABLE

TABLE 19 FRIEND'S ATTITUDES TOWARD BUSING BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * * * * * * * *  C R O S S T A B U L A T I O N   O F  * * * * * * * * * * * * * * * *
      VAR112    BUSING STATUS                                                  BY  VAR120    FRIENDS ATTITUDE TO BUSING
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                          VAR120
              COUNT    I
              ROW PCT  IPOSITIVE NEUTRAL   NEGATIVE    ROW
              COL PCT  I FEELING             FEEL      TOTAL
              TOT PCT  I     1.00I     2.00I     3.00I
VAR112        ---------I---------I---------I---------I
                  1.00 I      5  I     17  I     33  I     55
     YES               I    9.1  I   30.9  I   60.0  I   47.0
                       I   62.5  I   56.7  I   41.8  I
                       I    4.3  I   14.5  I   28.2  I
                      -I---------I---------I---------I
                  2.00 I      3  I     13  I     46  I     62
     NO                I    4.8  I   21.0  I   74.2  I   53.0
                       I   37.5  I   43.3  I   58.2  I
                       I    2.6  I   11.1  I   39.3  I
                      -I---------I---------I---------I
              COLUMN          8       30        79       117
              TOTAL         6.8     25.6      67.5     100.0

RAW CHI SQUARE =      2.76366 WITH      2 DEGREES OF FREEDOM.  SIGNIFICANCE =    .2511
CRAMER'S V =        .15369
CONTINGENCY COEFFICIENT =       .15191
KENDALL'S TAU B =        .14978
KENDALL'S TAU C =        .14552
GAMMA =       .39072
SOMERS'S D =       .15361
```

BEST COPY AVAILABLE

TABLE 20 PARENT'S ATTITUDES TOWARD BUSING BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * * * * *   C R O S S T A B U L A T I O N   O F   * * * * * * * * * * * * *
    VAR112    BUSING STATUS                                   BY  VAR119    PARENTS ATTITUDE TO BUSING
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                     VAR119
           COUNT   I
           ROW PCT IPOSITIVE NEUTRAL  NEGATIVE   ROW
           COL PCT I FEELING            FEEL     TOTAL
           TOT PCT I    1.00I    2.00I    3.00I
VAR112     --------I--------I--------I--------I
            1.00   I    11  I    26  I    18  I    55
  YES              I  20.0  I  47.3  I  32.7  I  47.4
                   I  64.7  I  45.6  I  42.9  I
                   I   9.5  I  22.4  I  15.5  I
                  -I--------I--------I--------I
            2.00   I     6  I    31  I    24  I    61
  NO               I   9.8  I  50.8  I  39.3  I  52.6
                   I  35.3  I  54.4  I  57.1  I
                   I   5.2  I  26.7  I  20.7  I
                  -I--------I--------I--------I
           COLUMN       17       57       42      116
            TOTAL     14.7     49.1     36.2    100.0

RAW CHI SQUARE =     2.46257 WITH    2 DEGREES OF FREEDOM.  SIGNIFICANCE =    .2919
CRAMER#S V =      .14570
CONTINGENCY COEFFICIENT =      .14418
KENDALL#S TAU B =       .11005
KENDALL#S TAU C =       .12049
GAMMA =      .19644
SOMERS#S D =      .09983
NUMBER OF MISSING OBSERVATIONS =      1
```

BEST COPY AVAILABLE

TABLE 21 EVALUATION OF BUSING ADVANTAGES BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * * *  C R O S S T A B U L A T I O N   O F  * * * * * * * *
   VAR112   BUSING STATUS                                    BY  VAR118   BUSING EVALUATED
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                  VAR118
           COUNT  I
         ROW PCT  ISTRONGLY AGREE      DISAGREE STRONGLY   ROW
         COL PCT  I AGREE                       DISAGRE   TOTAL
         TOT PCT  I    1.00I    2.00I    3.00I    4.00I
VAR112   ---------I--------I--------I--------I--------I
            1.00  I     5  I    22  I    19  I     9  I    55
  YES             I   9.1  I  40.0  I  34.5  I  16.4  I  47.8
                  I  50.0  I  51.2  I  42.2  I  52.9  I
                  I   4.3  I  19.1  I  16.5  I   7.8  I
                 -I--------I--------I--------I--------I
            2.00  I     5  I    21  I    26  I     8  I    60
  NO              I   8.3  I  35.0  I  43.3  I  13.3  I  52.2
                  I  50.0  I  48.8  I  57.8  I  47.1  I
                  I   4.3  I  18.3  I  22.6  I   7.0  I
                 -I--------I--------I--------I--------I
          COLUMN        10       43        45       17      115
           TOTAL       8.7     37.4      39.1     14.8    100.0

RAW CHI SQUARE =      .95538 WITH     3 DEGREES OF FREEDOM,  SIGNIFICANCE =   .8120
CRAMER#S V =      .09115
CONTINGENCY COEFFICIENT =      .09077
KENDALL#S TAU B =      .02679
KENDALL#S TAU C =      .03115
GAMMA =      .04584
SOMERS#S D =      .02299
NUMBER OF MISSING OBSERVATIONS =       2
```

BEST COPY AVAILABLE

TABLE 22 BUSING FOR EFFECTIVE SCHOOL INTEGRATION
BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * *  C R O S S T A B U L A T I O N   O F  * * * * * * * * * * *
   VAR112    BUSING STATUS                                   BY  VAR113    PERCEIVED BUSING EFFECT
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                  VAR113
         COUNT   I
         ROW PCT ISTRONGLY AGREE     DISAGREE STRONGLY   ROW
         COL PCT I AGREE                      DISAGREE  TOTAL
         TOT PCT I     1.00I     2.00I     3.00I     4.00I
VAR112   --------I---------I---------I---------I---------I
           1.00  I     7   I    17   I    20   I    11   I    55
  YES            I  12.7   I  30.9   I  36.4   I  20.0   I  47.4
                 I  77.8   I  42.5   I  46.5   I  45.8   I
                 I   6.0   I  14.7   I  17.2   I   9.5   I
                -I---------I---------I---------I---------I
           2.00  I     2   I    23   I    23   I    13   I    61
  NO             I   3.3   I  37.7   I  37.7   I  21.3   I  52.6
                 I  22.2   I  57.5   I  53.5   I  54.2   I
                 I   1.7   I  19.8   I  19.8   I  11.2   I
                -I---------I---------I---------I---------I
         COLUMN        9        40        43        24       116
         TOTAL       7.8      34.5      37.1      20.7     100.0

RAW CHI SQUARE =      3.75300 WITH      3 DEGREES OF FREEDOM.  SIGNIFICANCE =    .2894
CRAMER#S V =       .17968
CONTINGENCY COEFFICIENT =      .17704
KENDALL#S TAU B =      .05631
KENDALL#S TAU C =      .04629
GAMMA =      .09521
SOMER#S D =      .04770
NUMBER OF MISSING OBSERVATIONS =        1
```

BEST COPY AVAILABLE

TABLE 23 FAVOR BUSING TO SCHOOL OUTSIDE NEIGHBORHOOD
BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * * * *  C R O S S T A B U L A T I O N   O F  * * * * * * * * *
    VAR112    BUSING STATUS                                          BY  VAR102    BUSING ATTITUDE
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
                 VAR102
        COUNT   I
        ROW PCT ISTRONGLY AGREE     DISAGREE STRONGLY    ROW
        COL PCT I AGREE                      DISAGRE   TOTAL
                I    1.00I    2.00I    3.00I    4.00I
VAR112  --------I--------I--------I--------I--------I
         1.00   I     5  I    12  I    22  I    16  I    55
  YES           I   9.1  I  21.8  I  40.0  I  29.1  I  47.0
                I  55.6  I  54.5  I  42.3  I  47.1  I
               -I--------I--------I--------I--------I
         2.00   I     4  I    10  I    30  I    18  I    62
  NO            I   6.5  I  16.1  I  48.4  I  29.0  I  53.0
                I  44.4  I  45.5  I  57.7  I  52.9  I
               -I--------I--------I--------I--------I
         COLUMN       9       22       52       34      117
          TOTAL     7.7     18.8     44.4     29.1    100.0
RAW CHI SQUARE =      1.22093 WITH    3 DEGREES OF FREEDOM.  SIGNIFICANCE =   .7466
CRAMER*S V =      .10240
CONTINGENCY COEFFICIENT =      .10187
KENDALL*S TAU B =      .05083
KENDALL*S TAU C =      .05903
GAMMA =      .08669
SOMER*S D =      .04361
```

differences between groups are not statistically significant, 31% of bused students favored this compared with 23% of the non-bused students. Thus, while bused students are not very positive about being bused (Table 16, 9% are positive), they are more positive (Table 23, 31% in favor) about busing students in general.

The two major objections to busing that the courts will admit as possible evidence cover situations in which busing is either a risk to the health of the child or hinders the learning process. Of course the courts have substantial evidence in mind for such situations; evidence such as medical reports, etc. Nevertheless two items were included to measure bused and non-bused student attitudes toward these questions. Responses to the question of whether busing is a risk to the health of students (Question 44, Form D) are found in Table 24. While differences are not significant at the .05 level, there is a definite trend in the relation between these variables. If one takes a liberal position with respect to significance, a greater proportion of bused students (58%) see busing as a risk to physical health, than non-bused students (47%). Responses to the question of whether busing hinders the learning process (Question 45, Form D) are found in Table 25. The majority of both groups do not think busing hinders the learning process. Thus, black students do not see busing as a significant risk to student health nor do they see it as hindering the learning process.

An interesting similarity of agreement between bused and non-bused student responses occurs with an item designed to ascertain whether the money used for buying school buses might better be used to upgrade substandard schools (Question 47, Form D). Table 26 presents this data. 84% of bused students and 87% of non-bused students agree with this policy. A similar configuration of opinion occurs with respect to student attitudes on teacher reassignment (Question 46, Form D). 92% of bused students and 91% of non-bused students agree that black students could receive the same quality education as white students if top quality teachers were relocated in a fair distribution among high schools. Thus, both the alternatives of upgrading substandard schools and the relocation of quality teachers were highly esteemed by minority students in this study.

One final question relating to black student attitudes toward busing involves parents appraisal of the school the respondent is attending (Question 57, Form D). Differences observed in Table 28 are statistically significant. Whereas 70% of the parents of non-bused students have a positive appraisal of the school, only 35% of the parents of bused students have positive appraisals of the receiving schools to which their children are bused. Three times as many

BEST COPY AVAILABLE

TABLE 24 BUSING RISKS TO STUDENT HEALTH BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * *   C R O S S T A B U L A T I O N   O F   * * * * * * * *
    VAR112    BUSING STATUS                                       BY  VAR114    BUSING AND HEALTH
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                 VAR114
          COUNT  I
        ROW PCT  ISTRONGLY AGREE       DISAGREE STRONGLY    ROW
        COL PCT  I AGREE                        DISAGRE    TOTAL
        TOT PCT  I     1.00I     2.00I     3.00I     4.00I
VAR112   --------I---------I---------I---------I---------I
           1.00  I      4  I     28  I     22  I      1  I     55
  YES            I    7.3  I   50.9  I   40.0  I    1.8  I   47.8
                 I   30.8  I   59.6  I   43.1  I   25.0  I
                 I    3.5  I   24.3  I   19.1  I     .9  I
                -I---------I---------I---------I---------I
           2.00  I      9  I     19  I     29  I      3  I     60
  NO             I   15.0  I   31.7  I   48.3  I    5.0  I   52.2
                 I   69.2  I   40.4  I   56.9  I   75.0  I
                 I    7.8  I   16.5  I   25.2  I    2.6  I
                -I---------I---------I---------I---------I
         COLUMN        13        47        51         4       115
          TOTAL      11.3      40.9      44.3       3.5     100.0

RAW CHI SQUARE =       5.40008 WITH     3 DEGREES OF FREEDOM.  SIGNIFICANCE =    .1447
CRAMERS V =       .21670
CONTINGENCY COEFFICIENT =       .21178
KENDALL#S TAU B =       .06540
KENDALL#S TAU C =       .07289
GAMMA =     .11526
SOMERS#S D =      .05857
NUMBER OF MISSING OBSERVATIONS =          2
```

TABLE 25 BUSING AND THE LEARNING PROCESS BY RESPONDENT'S BUSING STATUS

BEST COPY AVAILABLE

```
* * * * * * * * * * * * * * * * * * * * * * * *   C R O S S T A B U L A T I O N   O F  * * * * * * * * *
    VAR112    BUSING STATUS                                                 BY  VAR115    BUSING AND LEARNING
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                  VAR115
         COUNT  I
       ROW PCT  ISTRONGLY AGREE      DISAGREE STRONGLY   ROW
       COL PCT  I AGREE                       DISAGRE   TOTAL
       TOT PCT  I     1.00I     2.00I     3.00I     4.00I
VAR112         --------I---------I---------I---------I---------I
          1.00  I      8  I     15  I     29  I      3  I     55
   YES          I   14.5  I   27.3  I   52.7  I    5.5  I   48.2
                I   61.5  I   50.0  I   47.5  I   30.0  I
                I    7.0  I   13.2  I   25.4  I    2.6  I
               -I---------I---------I---------I---------I
          2.00  I      5  I     15  I     32  I      7  I     59
   NO           I    8.5  I   25.4  I   54.2  I   11.9  I   51.8
                I   38.5  I   50.0  I   52.5  I   70.0  I
                I    4.4  I   13.2  I   28.1  I    6.1  I
               -I---------I---------I---------I---------I
        COLUMN        13        30        61        10       114
         TOTAL      11.4      26.3      53.5       8.8     100.0

RAW CHI SQUARE =      2.30233 WITH      3 DEGREES OF FREEDOM.  SIGNIFICANCE =    .5121
CRAMER#S V =       .14211
CONTINGENCY COEFFICIENT =      .14070
KENDALL#S TAU B =       .11278
KENDALL#S TAU C =       .12588
GAMMA =      .20138
SOMER#S D =      .10091
NUMBER OF MISSING OBSERVATIONS =       3
```

BEST COPY AVAILABLE

TABLE 26 BUSING VERSUS SUBSTANDARD SCHOOL UPGRADING BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * * *   C R O S S T A B U L A T I O N   O F   * * * * * * * *
   VAR112    BUSING STATUS                                          BY  VAR117    UPGRADE SUBSTAND
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                 VAR117
         COUNT  I
       ROW PCT  ISTRONGLY AGREE      DISAGREE STRONGLY   ROW
       COL PCT  I AGREE                       DISAGRE   TOTAL
       TOT PCT  I     1.00I     2.00I     3.00I     4.00I
VAR112  --------I---------I---------I---------I---------I
          1.00  I    23   I    23   I     5   I     4   I     55
  YES           I  41.8   I  41.8   I   9.1   I   7.3   I   47.8
                I  47.9   I  46.0   I  45.5   I  66.7   I
                I  20.0   I  20.0   I   4.3   I   3.5   I
               -I---------I---------I---------I---------I
          2.00  I    25   I    27   I     6   I     2   I     60
  NO            I  41.7   I  45.0   I  10.0   I   3.3   I   52.2
                I  52.1   I  54.0   I  54.5   I  33.3   I
                I  21.7   I  23.5   I   5.2   I   1.7   I
               -I---------I---------I---------I---------I
        COLUMN       48        50        11         6       115
         TOTAL     41.7      43.5       9.6       5.2     100.0

RAW CHI SQUARE =      .94530 WITH   3 DEGREES OF FREEDOM.  SIGNIFICANCE =    .8145
CRAMER#S V =      .09066
CONTINGENCY COEFFICIENT =      .09029
KENDALL#S TAU B =      -.01842
KENDALL#S TAU C =      -.02057
GAMMA =     -.03291
SOMER#S D =     -.01646
NUMBER OF MISSING OBSERVATIONS =      2
```

BEST COPY AVAILABLE

TABLE 27 BUSING VERSUS RELOCATION OF QUALITY TEACHERS BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * *  C R O S S T A B U L A T I O N   O F  * * * * * * * * *
   VAR112    BUSING STATUS                                   BY  VAR116    DISTRIB OF QUALITY
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                    VAR116
           COUNT   I
          ROW PCT  ISTRONGLY AGREE      DISAGREE STRONGLY   ROW
          COL PCT  I AGREE                       DISAGRE    TOTAL
          TOT PCT  I    1.00I    2.00I    3.00I    4.00I
VAR112    ---------I--------I--------I--------I--------I
            1.00   I   25   I   19   I    8   I    2   I    54
  YES              I  46.3  I  35.2  I  14.8  I   3.7  I  46.6
                   I  51.0  I  42.2  I  44.4  I  50.0  I
                   I  21.6  I  16.4  I   6.9  I   1.7  I
                  -I--------I--------I--------I--------I
            2.00   I   24   I   26   I   10   I    2   I    62
  NO               I  38.7  I  41.9  I  16.1  I   3.2  I  53.4
                   I  49.0  I  57.8  I  55.6  I  50.0  I
                   I  20.7  I  22.4  I   8.6  I   1.7  I
                  -I--------I--------I--------I--------I
          COLUMN        49       45       18        4      116
          TOTAL       42.2     38.8     15.5      3.4    100.0

RAW CHI SQUARE =       .78352 WITH     3 DEGREES OF FREEDOM.  SIGNIFICANCE =   .8534
CRAMER#S V =      .08219
CONTINGENCY COEFFICIENT =      .08191
KENDALL#S TAU B =      .05716
KENDALL#S TAU C =      .06480
GAMMA =      .10246
SOMERS D =      .05017
NUMBER OF MISSING OBSERVATIONS =      1
```

BEST COPY AVAILABLE

TABLE 28 PARENTS' APPRAISAL OF RESPONDENT'S SCHOOL BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * * * * * *   C R O S S T A B U L A T I O N   O F  * * * * * * * * * * * * *
   VAR112    BUSING STATUS                                          BY  VAR127    PARENTS APPRAISAL OF SCHOOL
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                    VAR127
           COUNT   I
         ROW PCT  IPOSITIVE NEUTRAL  NEGATIVE   ROW
         COL PCT  I                             TOTAL
         TOT PCT  I     1.00I     2.00I     3.00I
VAR112   --------I---------I---------I---------I
           1.00  I    19   I    27   I     9   I    55
   YES           I  34.5   I  49.1   I  16.4   I  47.8
                 I  31.1   I  64.3   I  75.0   I
                 I  16.5   I  23.5   I   7.8   I
                -I---------I---------I---------I
           2.00  I    42   I    15   I     3   I    60
   NO            I  70.0   I  25.0   I   5.0   I  52.2
                 I  68.9   I  35.7   I  25.0   I
                 I  36.5   I  13.0   I   2.6   I
                -I---------I---------I---------I
          COLUMN      61        42        12       115
          TOTAL     53.0      36.5      10.4     100.0

RAW CHI SQUARE =    14.91150 WITH     2 DEGREES OF FREEDOM.  SIGNIFICANCE =   .0006
CRAMERS V =      .36009
CONTINGENCY COEFFICIENT =      .33879
KENDALLS TAU B =      -.30574
KENDALLS TAU C =      -.37021
GAMMA =     -.59130
SOMERS D =     -.32227
NUMBER OF MISSING OBSERVATIONS =        2
```

parents of bused students are dissatisfied with the school their child attends as parents of non-bused students.

Attitudes of black students toward busing, as reported in Tables 16 through 28, indicate few significant differences between black students bused to previously all white schools and black students who are not bused. The only significant difference between the two group's attitudes toward busing are differences in parental appraisal of respondent's schools. A significantly higher proportion of the parents of non-bused students have positive appraisals of their children's schools. Bused students' parents have more negative appraisals. For the most part, bused black students are neutral in their personal attitudes toward busing while the majority of their friends view busing negatively. The majority of black parents are neutral toward busing, although a greater number are negative than positive. Bused students cite personal reasons most often for a justification of their views of busing as advantageous or disadvantageous. The overwhelming majority of black students would rather see substandard schools upgraded and quality teachers relocated, than the program of busing, although most do not think busing hinders the learning process.

2. Attitudes Toward Classroom Compositional Factors

Another set of items important for an understanding of black student attitudes toward desegregated school settings concerns student attitudes toward classroom composition. The question to be answered in this section is whether after being bused for two years to a previously all white segregated school, bused black students have different attitudes toward classroom compositional factors than their non-bused black peers. Table 29 presents data for the compositional factor of the number of white students desired in school (Question 52, Form D). Differences between groups are not significant. Whereas 49% of non-bused students choose the categories of no white students or less than half white students as the desired number for their ideal school, 61% of bused students choose these categories. More bused students desire fewer white students in school than non-bused students. A closely related question concerns the number of white teachers black students want in their ideal school (Question 53, Form D). Again, while the differences between bused and non-bused groups are not significant, over half of each group chose the none or less than half categories. Thus, for both questions, the majority of black students are of the opinion that none or less than half are the appropriate number of white students and white teachers to have at school. Attendance in a newly desegregated school for two years does not appear to have exercised any effect on bused student responses to these items.

BEST COPY AVAILABLE

TABLE 29 DESIRED NUMBER OF WHITE STUDENTS BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * * *  C R O S S T A B U L A T I O N   O F  * * * * * * * * *
   VAR112    BUSING STATUS                                      BY  VAR122    DESIRED ANGLO STUDS
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                 VAR122
         COUNT   I
         ROW PCT INONE      LESS THA ABOUT HA MORE THA   ROW
         COL PCT I          N HALF   LF       N   HALF   TOTAL
         TOT PCT I    1.00I    2.00I    3.00I    4.00I
VAR112   --------I--------I--------I--------I--------I
           1.00  I   15   I   18   I   20   I    1   I    54
  YES            I  27.8  I  33.3  I  37.0  I   1.9  I  47.8
                 I  57.7  I  50.0  I  40.0  I 100.0  I
                 I  13.3  I  15.9  I  17.7  I    .9  I
                -I--------I--------I--------I--------I
           2.00  I   11   I   18   I   30   I    0   I    59
  NO             I  18.6  I  30.5  I  50.8  I   0.0  I  52.2
                 I  42.3  I  50.0  I  60.0  I   0.0  I
                 I   9.7  I  15.9  I  26.5  I   0.0  I
                -I--------I--------I--------I--------I
         COLUMN      26       36       50        1      113
         TOTAL      23.0     31.9     44.2       .9    100.0

RAW CHI SQUARE =     3.40040 WITH     3 DEGREES OF FREEDOM.  SIGNIFICANCE =   .3339
CRAMER#S V =       .17348
CONTINGENCY COEFFICIENT =       .17093
KENDALL#S TAU B =       .11636
KENDALL#S TAU C =       .13251
GAMMA =       .20172
SOMER#S D =       .10198
NUMBER OF MISSING OBSERVATIONS =        4
```

BEST COPY AVAILABLE

TABLE 30 DESIRED NUMBER OF WHITE TEACHERS BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * * * *  C R O S S T A B U L A T I O N   O F  * * * * * * * * * * *
   VAR112    BUSING STATUS                                    BY  VAR123    DESIRED ANGLO TEACHERS
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                    VAR123
            COUNT  I
          ROW PCT  INONE       LESS THA ABOUT HA MORE THA   ROW
          COL PCT  I           N HALF   LF       N   HALF  TOTAL
          TOT PCT  I     1.00I     2.00I     3.00I     4.00I
VAR112    ---------I---------I---------I---------I---------I
             1.00  I     16  I     17  I     19  I      3  I    55
   YES             I   29.1  I   30.9  I   34.5  I    5.5  I  49.1
                   I   55.2  I   47.2  I   43.2  I  100.0  I
                   I   14.3  I   15.2  I   17.0  I    2.7  I
                  -I---------I---------I---------I---------I
             2.00  I     13  I     19  I     25  I      0  I    57
   NO              I   22.8  I   33.3  I   43.9  I    0.0  I  50.9
                   I   44.8  I   52.8  I   56.8  I    0.0  I
                   I   11.6  I   17.0  I   22.3  I    0.0  I
                  -I---------I---------I---------I---------I
           COLUMN        29        36        44         3     112
            TOTAL      25.9      32.1      39.3       2.7   100.0

RAW CHI SQUARE =      4.20526 WITH      3 DEGREES OF FREEDOM.  SIGNIFICANCE =    .2401
CRAMER'S V =       .19377
CONTINGENCY COEFFICIENT =       .19023
KENDALL'S TAU B =       .03542
KENDALL'S TAU C =       .04114
GAMMA =      .06059
SOMERS'S D =       .03049
NUMBER OF MISSING OBSERVATIONS =         5
```

Another item asked of students concerned the type of racial mix the respondent thought would be of highest benefit to them academically (Question 54, Form D). Differences in responses between the two groups are statistically significant, with bused students choosing the all black setting more than any other category. Non-bused student's largest response category is the integrated school setting. It would appear the experiences of the bused black students are predominately negative toward integration. A significant minority of bused students (9.3%) however, did choose predominantly white schools. Responses of bused students to this item are probably related to their busing experience, with those bused students who view busing negatively choosing an all black setting.

Related to the consideration of classroom composition are minority student attitudes toward black and white teachers. Two items measured these attitudes. Table 32 presents data for the relationship between teacher patience and teacher's race (Question 55, Form D) and Table 33, data for the relationship between teacher's race and subject stimulation (Question 56, Form D). No significant differences between groups are observed. The majority of minority students see white and black teachers about equally as patient and about equally as stimulating.

Two final items were asked in order to determine whether busing had any effect on the way in which minority students evaluated themselves in comparison to others. Table 34 presents data for the degree to which respondents perceive the school's teachers to be interested in them as persons (Question 29, Form D). A significantly higher number of non-bused students perceive their teachers as interested in them than bused students do. Whereas 81% of non-bused students experience teacher interest, only 51% of bused students perceive such interest. Table 35 presents data as to the degree to which respondents perceive their brightness in comparison to others (Question 35, Form D). From inspection of Table 31, it is observed that the majority of black students perceive themselves as being average in brightness, compared to others in their school. Differences between bused and non-bused groups are not significant, however, a smaller proportion of bused students perceive themselves to be above average in brightness or among the brightest.

After two years of busing, bused student attitudes toward classroom compositional factors are not significantly different from those of non-bused blacks. Of the data presented in Tables 29 through 35 bused and non-bused students differed significantly in response to only two items: the desired racial mix of school and perceived teacher interest. Bused students overwhelmingly desire an all black school setting and do not perceive their teachers to be as interested in them. Non-bused students overwhelmingly choose an integrated racial school setting. Tentatively it would appear

BEST COPY AVAILABLE

TABLE 31 DESIRED SCHOOL RACIAL MIX
BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * * *   C R O S S T A B U L A T I O N   O F   * * * * * * * * *
    VAR112    BUSING STATUS                                        BY  VAR124    DESIRED SCHOOL TYPE
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                 VAR124
          COUNT  I
        ROW PCT  IFREEDOM K INTEGRAT ALL BLAC DOES NOT   ROW
        COL PCT  IHITE SCH ED SCHOO K SCHOOL  MATTER    TOTAL
        TOT PCT  I    1.00I    2.00I    3.00I    4.00I
VAR112   --------I--------I--------I--------I--------I
          1.00   I     5  I    14  I    22  I    13  I    54
   YES           I   9.3  I  25.9  I  40.7  I  24.1  I  47.0
                 I 100.0  I  36.8  I  56.4  I  39.4  I
                 I   4.3  I  12.2  I  19.1  I  11.3  I
                -I--------I--------I--------I--------I
          2.00   I     0  I    24  I    17  I    20  I    61
   NO            I   0.0  I  39.3  I  27.9  I  32.8  I  53.0
                 I   0.0  I  63.2  I  43.6  I  60.6  I
                 I   0.0  I  20.9  I  14.8  I  17.4  I
                -I--------I--------I--------I--------I
         COLUMN        5       38       39       33      115
          TOTAL      4.3     33.0     33.9     28.7    100.0

RAW CHI SQUARE =     9.56607 WITH     3 DEGREES OF FREEDOM.  SIGNIFICANCE =   .0248
CRAMER#S V =      .28538
CONTINGENCY COEFFICIENT =      .27443
KENDALL#S TAU B =      .05205
KENDALL#S TAU C =      .06110
GAMMA =      .08692
SOMER#S D =      .04417
NUMBER OF MISSING OBSERVATIONS =        2
```

BEST COPY AVAILABLE

TABLE 32 TEACHER PATIENCE AND RACE BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * *  C R O S S T A B U L A T I O N   O F  * * * * * * * * * * * * *
  VAR112    BUSING STATUS                                        BY  VAR125    TEACHER PATIENCE BY RACE
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                    VAR125
         COUNT    I
         ROW PCT  IBLACK      WHITE      ABOUT SA   ROW
         COL PCT  I                      ME         TOTAL
         TOT PCT  I    1.00I      2.00I      3.00I
VAR112   --------I---------I---------I---------I
           1.00   I    15   I     5   I    33   I    53
  YES             I  28.3   I   9.4   I  62.3   I  46.5
                  I  41.7   I  50.0   I  48.5   I
                  I  13.2   I   4.4   I  28.9   I
                 -I---------I---------I---------I
           2.00   I    21   I     5   I    35   I    61
  NO              I  34.4   I   8.2   I  57.4   I  53.5
                  I  58.3   I  50.0   I  51.5   I
                  I  18.4   I   4.4   I  30.7   I
                 -I---------I---------I---------I
         COLUMN        36        10         68      114
          TOTAL      31.6       8.8       59.6    100.0

RAW CHI SQUARE =       .44408 WITH     2 DEGREES OF FREEDOM,  SIGNIFICANCE =   .7788
CRAMER#S V =       .06622
CONTINGENCY COEFFICIENT =       .06607
KENDALL#S TAU B =      -.05598
KENDALL#S TAU C =      -.05786
GAMMA =     -.10517
SOMERS#S D =     -.05309
NUMBER OF MISSING OBSERVATIONS =          3
```

BEST COPY AVAILABLE

TABLE 33 TEACHER'S RACE AND SUBJECT STIMULATION BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * * * *  C R O S S T A B U L A T I O N   O F  * * * * * * * * *
    VAR112    BUSING STATUS                                     BY  VAR126    TEACHER STIMULATION
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                    VAR126
           COUNT   I
           ROW PCT IBLACK     WHITE     ABOUT SA   ROW
           COL PCT I                    ME         TOTAL
           TOT PCT I     1.00I     2.00I     3.00I
VAR112     --------I---------I---------I---------I
             1.00  I    11   I     7   I    34   I    52
  YES              I  21.2   I  13.5   I  65.4   I  46.4
                   I  40.7   I  70.0   I  45.3   I
                   I   9.8   I   6.3   I  30.4   I
                  -I---------I---------I---------I
             2.00  I    16   I     3   I    41   I    60
  NO               I  26.7   I   5.0   I  68.3   I  53.6
                   I  59.3   I  30.0   I  54.7   I
                   I  14.3   I   2.7   I  36.6   I
                  -I---------I---------I---------I
           COLUMN       27        10        75       112
           TOTAL      24.1       8.9      67.0     100.0

RAW CHI SQUARE =     2.62120 WITH    2 DEGREES OF FREEDOM.  SIGNIFICANCE =    .2697
CRAMER#S V =      .15298
CONTINGENCY COEFFICIENT =      .15122
KENDALL#S TAU B =      .00422
KENDALL#S TAU C =      .00415
GAMMA =      .00850
SOMERS#S D =      .00427
NUMBER OF MISSING OBSERVATIONS =        5
```

BEST COPY AVAILABLE

TABLE 34 PERCEIVED TEACHER INTEREST
BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * * * *  C R O S S T A B U L A T I O N   O F  * * * * * * * *
   VAR112    BUSING STATUS                                        BY  VAR099    TEACHERS INTEREST
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                  VAR099
          COUNT   I
          ROW PCT ISTRONGLY AGREE      DISAGREE STRONGLY    ROW
          COL PCT I AGREE                       DISAGRE   TOTAL
          TOT PCT I     1.00I     2.00I     3.00I     4.00I
VAR112    --------I---------I---------I---------I---------I
            1.00  I    10   I    18   I    22   I     5   I    55
  YES             I  18.2   I  32.7   I  40.0   I   9.1   I  47.0
                  I  40.0   I  34.0   I  68.8   I  71.4   I
                  I   8.5   I  15.4   I  18.8   I   4.3   I
                 -I---------I---------I---------I---------I
            2.00  I    15   I    35   I    10   I     2   I    62
  NO              I  24.2   I  56.5   I  16.1   I   3.2   I  53.0
                  I  60.0   I  66.0   I  31.3   I  28.6   I
                  I  12.8   I  29.9   I   8.5   I   1.7   I
                 -I---------I---------I---------I---------I
          COLUMN       25        53        32         7     117
          TOTAL      21.4      45.3      27.4       6.0   100.0

RAW CHI SQUARE =    11.86220 WITH    3 DEGREES OF FREEDOM.  SIGNIFICANCE =   .0079
CRAMER'S V =      .31841
CONTINGENCY COEFFICIENT =      .30340
KENDALL'S TAU B =     -.23757
KENDALL'S TAU C =     -.27467
GAMMA =     -.39167
SOMERS'S D =     -.20475
```

TABLE 35 PERCEIVED STUDENT BRIGHTNESS IN COMPARISON WITH OTHERS BY RESPONDENT BUSING STATUS

	PERCEIVED Brightness Category					
Busing Status	Brightest	Above Average	Average	Below Average	Lowest	Total
Bused Students	1.9%	25.9%	66.7%	3.7%	1.9%	100% (54)
Non-Bused Students	3.2%	31.7%	60.3%	3.2%	1.6%	100% (63)
Total	2.8%	29.8%	62.3%	3.4%	1.7%	100% (117)

Chi Square = 2.3725 With 4 D.F. Significance = .6984

that the experience of being bused to desegregate previously all white Waco schools has influenced bused students to move away from an integrated model of racial mix to a separatist model of education. With respect to the other items on classroom composition, bused black student attitudes do not differ significantly from those of non-bused black students. Generally speaking, the majority of black students think the number of white students and teachers in their schools should be less than half, although they do not think white and black teachers differ that much in the degree of patience extended to them or in their ability to stimulate students to study. The majority of black students think their teachers are interested in them as persons and perceive themselves as average or above average in brightness in comparison with their fellow students.

3. Attitudes Toward Integration

A third and final set of items considered to be of potential significance in assessing bused student attitudes are those which attempt to measure whether busing has resulted in any changes in attitudes toward school desegregation and social integration in general. One theory used in some desegregation studies holds that while desegregated settings may or may not provide for a closing of the achievement gap between blacks and whites, desegregation has positive effects for the development of more favorable attitudes toward integration and an integrated society. Table 36 presents data for responses to the question of whether students think racial integration of public schools is a desirable goal (Question 38, Form D). While the two groups do not differ significantly in their answers, the overwhelming majority of black students agree that public school integration is a good thing. Thus while a large proportion of black students are critical of busing as a procedure to achieve school desegregation, they are not against school desegregation *per se*, but the form it takes in busing.

Table 37 presents data for attitudes as to whether school integration raises the educational attainment of minority students (Question 39, Form D). The majority of black students are of the opinion that school integration raises the educational attainment of minority students. Differences between bused and non-bused students are not significant. Table 38 presents student responses as to general social integration (Question 31, Form D). The overwhelming majority of black students favor general racial integration, with differences between bused and non-bused student answers not significant. Table 39 presents data for the relationship between busing status and perceived racial prejudice (Question 30, Form D). The majority of both groups of black students are of the opinion they have little racial prejudice. A smaller but non-significant, proportion of bused students feel they have little racial prejudice.

BEST COPY AVAILABLE

TABLE 36 DESIRABILITY OF SCHOOL INTEGRATION BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * * * * * *  C R O S S T A B U L A T I O N   O F  * * * * * * * * * * *
   VAR112    BUSING STATUS                                        BY  VAR108    INTEGRATION ATTITUDE
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                    VAR108
            COUNT   I
          ROW PCT   ISTRONGLY AGREE     DISAGREE STRONGLY   ROW
          COL PCT   I AGREE                       DISAGRE   TOTAL
          TOT PCT   I    1.00I    2.00I    3.00I    4.00I
VAR112     --------I--------I--------I--------I--------I
             1.00   I      8  I     33  I     11  I      3  I    55
   YES              I   14.5  I   60.0  I   20.0  I    5.5  I   47.4
                    I   47.1  I   45.8  I   45.8  I  100.0  I
                    I    6.9  I   28.4  I    9.5  I    2.6  I
                   -I--------I--------I--------I--------I
             2.00   I      9  I     39  I     13  I      0  I    61
   NO               I   14.8  I   63.9  I   21.3  I    0.0  I   52.6
                    I   52.9  I   54.2  I   54.2  I    0.0  I
                    I    7.8  I   33.6  I   11.2  I    0.0  I
                   -I--------I--------I--------I--------I
            COLUMN        17        72        24         3      116
             TOTAL      14.7      62.1      20.7       2.6    100.0

RAW CHI SQUARE =      3.42431 WITH      3 DEGREES OF FREEDOM.  SIGNIFICANCE =    .3307
CRAMERS V =      .17181
CONTINGENCY COEFFICIENT =      .16933
KENDALLS TAU B =      -.04627
KENDALLS TAU C =      -.04845
GAMMA =      -.08797
SOMERS D =      -.04407
NUMBER OF MISSING OBSERVATIONS =       1
```

TABLE 37 MINORITY STUDENT EDUCATIONAL ATTAINMENT AND SCHOOL INTEGRATION BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * * * * * * * * *  C R O S S T A B U L A T I O N   O F  * * * *
   VAR112    BUSING STATUS                                                   BY  VAR109    INTEGRATION
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                    VAR109
          COUNT   I
         ROW PCT  ISTRONGLY AGREE      DISAGREE STRONGLY     ROW
         COL PCT  I AGREE                        DISAGRE    TOTAL
         TOT PCT  I     1.00I     2.00I     3.00I     4.00I
VAR112   --------I--------I---------I---------I---------I
           1.00   I      9  I     27  I     14  I      5  I     55
  YES             I   16.4  I   49.1  I   25.5  I    9.1  I   47.0
                  I   56.3  I   43.5  I   46.7  I   55.6  I
                  I    7.7  I   23.1  I   12.0  I    4.3  I
                 -I---------I---------I---------I---------I
           2.00   I      7  I     35  I     16  I      4  I     62
  NO              I   11.3  I   56.5  I   25.8  I    6.5  I   53.0
                  I   43.8  I   56.5  I   53.3  I   44.4  I
                  I    6.0  I   29.9  I   13.7  I    3.4  I
                 -I---------I---------I---------I---------I
          COLUMN        16        62        30         9       117
           TOTAL      13.7      53.0      25.6       7.7     100.0

RAW CHI SQUARE =      1.11188 WITH      3 DEGREES OF FREEDOM.  SIGNIFICANCE =    .7742
CRAMER#S V =      .09748
CONTINGENCY COEFFICIENT =      .09702
KENDALL#S TAU B =      .00626
KENDALL#S TAU C =      .00701
GAMMA =      .01112
SOMER#S D =      .00558
```

TABLE 38 GENERAL INTEGRATION ATTITUDES
BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * * * * * *  C R O S S T A B U L A T I O N   O F  * * * * * * * * * * *
     VAR112    BUSING STATUS                                                 BY  VAR101    INTEGRATION ATTITUDE
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                      VAR101
            COUNT   I
            ROW PCT ISTRONGLY AGREE     DISAGREE STRONGLY   ROW
            COL PCT I AGREE                       DISAGRE   TOTAL
            TOT PCT I     1.00I     2.00I     3.00I     4.00I
VAR112      --------I---------I---------I---------I---------I
              1.00  I      9  I     36  I      5  I      5  I     55
   YES              I   16.4  I   65.5  I    9.1  I    9.1  I   47.4
                    I   34.6  I   50.0  I   41.7  I   83.3  I
                    I    7.8  I   31.0  I    4.3  I    4.3  I
                   -I---------I---------I---------I---------I
              2.00  I     17  I     36  I      7  I      1  I     61
   NO               I   27.9  I   59.0  I   11.5  I    1.6  I   52.6
                    I   65.4  I   50.0  I   58.3  I   16.7  I
                    I   14.7  I   31.0  I    6.0  I     .9  I
                   -I---------I---------I---------I---------I
            COLUMN        26        72        12         6      116
            TOTAL       22.4      62.1      10.3       5.2    100.0
RAW CHI SQUARE =     5.16501 WITH     3 DEGREES OF FREEDOM.  SIGNIFICANCE =    .1601
CRAMER#S V =      .21101
CONTINGENCY COEFFICIENT =      .20647
KENDALL#S TAU B =     -.13636
KENDALL#S TAU C =     -.14507
GAMMA =     -.26152
SOMER#S D =     -.13161
NUMBER OF MISSING OBSERVATIONS =        1
```

BEST COPY AVAILABLE

TABLE 39 PERCEIVED RACIAL PREJUDICE BY RESPONDENT'S BUSING STATUS

```
* * * * * * * * * * * * * * * * * * * *   C R O S S T A B U L A T I O N   O F  * * * * * * * *
     VAR112    BUSING STATUS                                       BY  VAR100    RACIAL PREJUDICE
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

                  VAR100
            COUNT   I
            ROW PCT ISTRONGLY AGREE      DISAGREE STRONGLY    ROW
            COL PCT I AGREE                       DISAGRE     TOTAL
            TOT PCT I    1.00I     2.00I     3.00I     4.00I
 VAR112     --------I--------I---------I---------I---------I
              1.00  I    13  I     27  I     11  I      3  I     54
   YES              I  24.1  I   50.0  I   20.4  I    5.6  I   46.6
                    I  41.9  I   43.5  I   55.0  I  100.0  I
                    I  11.2  I   23.3  I    9.5  I    2.6  I
                   -I--------I---------I---------I---------I
              2.00  I    18  I     35  I      9  I      0  I     62
   NO               I  29.0  I   56.5  I   14.5  I    0.0  I   53.4
                    I  58.1  I   56.5  I   45.0  I    0.0  I
                    I  15.5  I   30.2  I    7.8  I    0.0  I
                   -I--------I---------I---------I---------I
            COLUMN       31        62        20         3       116
            TOTAL      26.7      53.4      17.2       2.6     100.0

RAW CHI SQUARE =     4.50483 WITH     3 DEGREES OF FREEDOM.  SIGNIFICANCE =    .2115
CRAMER'S V =      .19710
CONTINGENCY COEFFICIENT =       .19342
KENDALL'S TAU B =     -.11846
KENDALL'S TAU C =     -.13080
GAMMA =      -.21256
SOMERS'S D =      -.10677
NUMBER OF MISSING OBSERVATIONS =       1
```

BEST COPY AVAILABLE

To sum up this section, the expected significant differences between bused and non-bused student attitudes toward integration did not materialize. Bused students do not have more favorable attitudes toward integration. Busing to achieve school desegregation does not appear to have contributed to any changes in student attitudes toward integration or the amount of perceived racial prejudice. Trends are opposite the predicted direction, with bused students having slightly less favorable attitudes toward integration. The majority of both bused and non-bused black students are favorable toward general racial integration in society and toward school integration, viewing the integration of schools as contributing to higher educational achievement levels of minority students.

B. Attitudes of White Receiving Students

A second aspect of the research objective being considered in this chapter is to determine majority student attitudes toward busing and school desegregation. An important component of the experience of bused minority students is the reception they receive from white students in previously all white segregated schools. The attitudes of white receiving students may prove to be an important determinant of the attitudes, experiences and educational achievement of the bused minority students. Responses of white students, some in receiving schools, some not, to a variety of items are presented in this section.

White students were asked about the number of white students they desired to have in school (Question 26, Form A). Responses for white students in Table 40 are separated into two categories: white students from receiving schools and white students from non-receiving schools. A chi square statistic is calculated for the significance of the distribution of responses among white students. For comparison purposes the responses of black students to the same question are included. Inspection of the differences between white and black students reveals white students prefer a higher proportion of white students in their schools than black students prefer. Whereas only 1% of black students desire more than half of their school to be white 62% of all white students desire such a student body. Among the white students, a statistically significant difference appears with whites from receiving schools disproportionately wanting more than half of their student bodies to be white. Whereas only 47% of whites from non-receiving schools want more than half of their fellow students to be white, some 77% of white students in receiving schools feel this way. Thus it would appear that the experience of attending a previously all white school

TABLE 40 DESIRED NUMBER OF WHITES IN SCHOOL BY RACE OF RESPONDENT AND RECEIVING SCHOOL STATUS

		Response Categories					
Race	Type of School	None	Less than Half	About Half	More than Half	All	Total
White	Receiving School			23%	34%	43%	100% (177)
	Non-Receiving School	1%	5%	47%	29%	18%	100% (178)
	Total	1%	3%	34%	31%	31%	100% (355)
Black		23%	32%	44%	1%	--	100% (113)

Chi Square = 34.027 With 4 D.F. Significance = .0001

TABLE 41 DESIRED NUMBER OF WHITE TEACHERS IN SCHOOL BY RACE OF RESPONDENT AND RECEIVING SCHOOL STATUS

		Response Categories					
	Type of School	None	Less than Half	About Half	More than Half	All	Total
White	Receiving School	2%	6%	40%	25%	27%	100% (179)
	Non-Receiving	1%	4%	51%	24%	20%	100% (188)
	Total	2%	5%	45%	25%	23%	100% (367)
Black		7%	11%	44%	19%	19%	100% (112)

Chi Square = 2.925 With 4 D.F. Significance = .0952

that is currently receiving bused minority students has the effect of increasing the number of white students wanted in the school by white receiving students.

A similar question concerns the number of white teachers desired in school by students (Question 27, Form A). Differences in response between white students and black students are not significant. The overwhelming majority of students of both races favor half or more of their teachers to be white. Differences between white receiving students and white students from non-receiving students are not significant at the .05 level. 18% of black students want less than half of their teachers to be white, compared with 8% of white receiving students and 5% of white students from non-receiving schools.

Another area related to white student attitudes concerns student appraisal of the degree to which teachers are interested in them as persons and communicate a spirit of interest and concern to the student (Question 36, Form A). Differences between black and white students are not significant. Two-thirds of the students of both races perceive their teachers to be interested in them. The response differences among the white students are statistically significant, however. White students in receiving schools are significantly less likely to perceive their teachers interest than white students in non-receiving schools. Two interpretations of this finding are possible. Either the climate is actually different in receiving and non-receiving schools such that both black and white students objectively perceive this climate, or white students in receiving schools do not perceive their teachers' interest due to the presence of and/or interaction with bused minority students.

Another item to measure the attitudes of white receiving students is designed to assess their self-perceptions of their own racial prejudice. Does interaction with bused minority students heighten or decrease white students' perceptions of their own racial prejudice. Responses to this item (Question 37, Form A) are found in Table 43. Differences between the black and total white responses are insignificant with the majority of the students of both races perceive little racial prejudice in themselves. Responses among white students are significantly different, however, with a statistically significant larger number of white students from receiving schools expressing moderate prejudice. The largest proportion of students who perceive themselves as having little prejudice are white students from non-receiving schools. Since almost all of the non-receiving schools have minority students in attendance, support is generated for the proposition that gradual school desegregation and integration may lower prejudice levels much more effectively than rapid school desegregation.

TABLE 42 PERCEPTIONS OF TEACHER INTEREST BY RACE OF RESPONDENT AND RECEIVING SCHOOL STATUS

Race	Type of School	Response Categories: Perceives Teacher is Interested	Response Categories: Does Not Perceive Teacher is Interested	Total
White	Receiving School	61%	39%	100% (180)
	Non-Receiving School	77%	23%	100% (192)
	Total	69%	31%	100% (372)
Black		67%	33%	100% (117)

Chi Square = 11.095 With 1 D.F. Significance = .001

TABLE 43 PERCEPTIONS OF RACIAL PREJUDICE BY RACE OF RESPONDENT AND RECEIVING SCHOOL STATUS

Race	Type	Response Categories Perceives Little Self-Prejudice	 Perceives Moderate Self-Prejudice	Total
White	Receiving School	75%	25%	100% (178)
	Non-Receiving School	83%	17%	100% (190)
	Total	76%	24%	100% (368)
Black		80%	20%	100% (116)

Chi Square = 10.067 With 1 D.F. Significance = .005

Turning to an analysis of attitudes toward integration among white students, a similar pattern emerges. Table 44 presents student responses to Question 38, Form A. The question raised with the inclusion of this item is whether attendance at receiving schools affects white student attitudes toward integration in general. All differences in this table are statistically significant. 85% of the black students have positive attitudes toward general racial integration in society. A significantly smaller proportion of white students (62%) are positive. Differences between whites from receiving and non-receiving schools reveal that white students from receiving schools have the most negative attitudes toward integration. Unless there are other differences between whites in receiving and non-receiving schools that this research project failed to observe, the proposition strongly suggested by the data is that white student attitudes toward integration are strongly affected by the type of school attended. White students in receiving schools manifest the smallest proportion of positive attitudes toward integration.

One final item included in this section concerns student attitudes toward busing. Given the distribution of responses in Table 44, one would expect white students in receiving schools to be least in favor of busing (Question 39, Form A). Table 45 presents the data for this item. All differences are statistically significant. A significantly higher percentage of black students (46%) are in favor of busing than white students (26%). In addition, whites from receiving schools are significantly less in favor of busing than their white peers in non-receiving schools. The evidence strongly suggests that type of school exerts a significant effect upon white student attitudes toward busing. The effect of busing on white students in receiving schools is to weaken their support of busing and appreciation of it as a means for school desegregation.

The purpose of this section is to determine what white student attitudes are toward busing and school desegregation. Generally speaking, white students would like the racial composition of teachers and the student body in their schools to be more than half white. The majority of white students perceive their teachers to be interested in them, perceive little racial prejudice in themselves, are generally favorable to integration in society, but are overwhelmingly against busing minority students to achieve school desegregation. Of special interest are the significant differences in attitudes between white students in receiving schools and non-receiving schools. While rival hypotheses are not controlled in this section, the data support the hypothesis that school type seriously affects white student attitudes. The experience of attending a receiving school appears to produce certain changes in white student attitudes; changes including an increased desire for more white students at school, lowered perceptions of teacher interest, greater

TABLE 44 INTEGRATION ATTITUDES BY RACE OF RESPONDENT AND RECEIVING SCHOOL STATUS

Race	Type of School	Positive Attitudes Toward Integration	Negative Attitudes Toward Integration	Total
White	Receiving Schools	50%	50%	100% (178)
	Non-Receiving Schools	74%	26%	100% (190)
	Total	62%	38%	100% (368)
Black		85%	15%	100% (116)

Chi Square = 23.94 At 1 D.F. Significance = .0001

TABLE 45 ATTITUDES TOWARD BUSING BY RACE OF RESPONDENT AND RECEIVING SCHOOL STATUS

Race	Type of School	In Favor of Busing	Not in Favor of Busing	Total
White	Receiving Schools	11%	89%	100% (177)
	Non-Receiving Schools	28%	72%	100% (193)
	Total	26%	74%	100% (370)
Black		46%	54%	100% (115)

Chi Square = 16.05 1 D.F. Significance = .0005 perception of self-prejudice, decreased support for integration and greater resistance to the concept of busing as a means to achieve school desegregation. A tentative proposition offered on the basis of the data presented in this section is that white student attitudes appear to be significantly related to whether the student attends a school that was gradually desegregated (the case with most of the non-receiving schools in this study) or a school that was rapidly desegregated (the receiving schools in this study). While the degree to which differences in white student attitudes affect the attitudes, experiences and educational achievement of bused minority students awaits presentation in the next chapter, it suffices to conclude this section reiterating the significantly different attitudes of white students in receiving and non-receiving schools.

C. Attitudes of Receiving School Teachers

An important component of the attitudes of both bused minority students and white receiving students are the attitudes and behavior of teachers in the receiving schools. Teachers play a crucial role in setting the tone and climate of interracial acceptance in the receiving school. The question to be discussed in this section is whether attitudes of receiving school teachers toward busing, integration and school desegregation are significantly different from teachers in non-receiving schools. If teacher attitudes at receiving and non-receiving schools differ significantly, they become a candidate for the explanation of attitude and behavior differences among bused minority students. Table 46 presents selected characteristics of the teachers surveyed in this study. Responses of teachers to all items in Questionnaire C (Appendix D) are available on request from the principal investigator, but were deemed unnecessary to include in this report. Marginal statistics reveal expected distributions with respect to race, sex, age and education categories. Table 47 presents differences in teachers' responses to the question of the percentage of white students counselled or taught (Question 18, Form C). Response differences between receiving school teachers and non-receiving school teachers are statistically significant. Teachers in receiving schools are more likely to teach and counsel white students than teachers in non-receiving schools. This reflects the larger proportion of minority students in non-receiving schools which were desegregated gradually due to changing neighborhood minority concentrations. Receiving schools are still predominantly white. A second reason for results of this table involve the occasional classroom segregation of minority students at receiving schools.

TABLE 46 CHARACTERISTICS OF WACO INDEPENDENT SCHOOL DISTRICT TEACHERS

Race	
Anglo	80%
Black	18%
Mexican American	2%

Sex	
Male	38%
Female	62%

Education of Parents	
Grade School	20%
High School	52%
College	28%

Respondents' Highest Earned Degree	
Bachelor's level	60%
Master's level	37%

Respondents' Self-Concept	
Positive	93%
Negative	7%

Age	
Under 26	14%
26 - 45	47%
46 - 65	39%

Preferred School Racial Composition	
All White	8%
Mostly White	45%
Half White	24%
Mostly Non-White	3%
No Preference	21%

Satisfaction With Assignment	
Satisfied	85%
Dissatisfied	15%

Percent of Teachers Agreeing With Following Statements	
Most Negroes could get ahead if they would try harder	72%
Most Mexican Americans could get ahead if they would try harder	79%
Prejudice by Mexican Americans is the primary reason Negroes are not more successful	42%
Prejudice by Negroes is the primary reason Mexican Americans are not more succesful	56%

TABLE 47 RACIAL COMPOSITION OF TEACHER'S CLASSES BY TEACHER'S RECEIVING SCHOOL STATUS

Teacher's Receiving School Status	Percentage of White Students					
	1-19%	20-39%	40-59%	60-79%	80-99%	Total
Receiving School	6%	4%	3%	28%	59%	100% (98)
Non-Receiving School	25%	25%	8%	28%	14%	100% (85)
Total	15%	14%	6%	28%	37%	100% (183)

Chi Square = 51.35 With 4 D.F. Significance = .0000

The racial composition of teachers in receiving and non-receiving schools is presented in Table 48. Differences are not significant. This table was included to indicate that differences in receiving school and non-receiving school teachers' attitudes are not due to the racial distribution of teachers in the two types of schools. Minority group teachers are evenly distributed at both receiving and non-receiving schools.

TABLE 48 TEACHERS' RACE BY TEACHERS RECEIVING SCHOOL STATUS

Teachers' Receiving School Status	Teachers' Race Anglo	 Black	 Mexican American	Total
Receiving School	83%	15%	2%	100% (98)
Non-Receiving School	74%	24%	2%	100% (85)
Total	80%	18%	2%	100% (183)

Chi Square = 3.831 With 2 D.F. Significance = .1857

Several items indicate teachers in the two types of settings view their environments quite differently. Table 49 presents teachers' attitudes toward the effectiveness of administration leadership (Question 43j, Form C). A significantly higher proportion of receiving school teachers rate administration leadership as non-effective. Support is provided for the suggestion that receiving school teachers are less satisfied with their teaching positions than non-receiving school teachers. The relation between teachers' receiving school status and perception of staff cooperation (Question 43h, Form C) is presented in Table 50. Differences are statistically significant, with a higher proportion of receiving school teachers perceiving staff cooperation as non-harmonious. Teachers in non-receiving schools were significantly more likely to view staff relations as cordial and cooperative. The third item which indicates that teachers in the two settings view their environments differently concerns the methods used to predict student success

(Question 19, Form C). Table 51 reveals significant differences between teachers especially with reference to the use of teacher recommendations and personality inventories to predict student success. Teachers from receiving schools are much more likely to rely on recommendations and less likely to rely on intelligence scores, aptitude scores, as personality inventory scores.

TABLE 49 TEACHER'S VIEWS OF SCHOOL ADMINISTRATION LEADERSHIP BY TEACHER'S RECEIVING SCHOOL STATUS

Teacher's Receiving School Status	School Administration Leadership		
	Effective	Non-Effective	Total
Receiving School	64%	36%	100% (98)
Non-Receiving School	81%	19%	100% (85)
Total	70%	30%	100% (183)

Chi Square = 4.943 With 1 D.F. Significance = .0512

Further investigation into the attitudinal differences between teachers in receiving and non-receiving schools indicate substantial variation in attitudes toward school socio-economic composition and receiving/non-receiving school status (Question 14, Form C). Differences are statistically significant, with a greater proportion of receiving school teachers desiring schools with students of professional and white collar parents than non-receiving school teachers. Table 53 presents data for teacher's preferences as to ethnic composition (Question 15, Form C). A significantly higher proportion of receiving school teachers prefer a predominantly Anglo-Saxon school ethnic composition. Interestingly, only a few teachers prefer a school with blue collar socio-economic composition or a school with a predominantly ethnic minority composition. Table 54 presents data for teachers' preferences as to school racial composition (Question 17, Form C). Differences are statistically significant and are most striking.

TABLE 50 TEACHER'S VIEWS OF STAFF COOPERATION BY TEACHER'S RECEIVING SCHOOL STATUS

Teacher's Receiving School Status	Teacher Cooperation at School		
	Work Well Together	Do Not Work Well Together	Total
Receiving School	85%	15%	100% (98)
Non-Receiving School	95%	5%	100% (85)
Total	89%	11%	100% (183)

Chi Square = 4.417 With 1 D.F. Significance = .0714

TABLE 51 BEST PREDICTOR OF STUDENT SUCCESS BY TEACHER'S RECEIVING SCHOOL STATUS

	Best Predictor of Student Success					
Teacher's Receiving School Status	Teacher Recommendation	Intelligence or Aptitude Scores	Personality Inventories	School Grades	Other	Total
Receiving School	43%	7%	12%	19%	19%	100% (98)
Non-Receiving School	21%	13%	25%	21%	20%	100% (85)
Total	33%	10%	18%	20%	19%	100% (183)

Chi Square = 13.279   With 4 D.F. Significance = .0209

TABLE 52 TEACHER'S CHOICE OF SCHOOL SOCIO-ECONOMIC SETTING BY TEACHER'S RECEIVING SCHOOL STATUS

Teacher's Receiving School Status	School Socio-Economic Setting					
	All or Mostly Professional + White Collar	General Cross Section	All or Mostly Factory + Blue Collar	Rural	No Preference	Total
Receiving School	20%	62%	1%	3%	14%	100% (98)
Non-Receiving School	6%	62%	4%	4%	24%	100% (85)
Total	14%	62%	2%	3%	19%	100% (183)

Chi Square = 14.498 With 4 D.F. Significance = .005

TABLE 53 TEACHER'S CHOICE OF SCHOOL ETHNIC COMPOSITION BY TEACHER'S RECEIVING SCHOOL STATUS

	School Ethnic Composition				
Teacher's Receiving School Status	Predominantly Anglo-Saxon	Mixture of Anglo-Saxon and Ethnic Minorities	Predominantly Ethnic Minorities	No Preference	Total
Receiving School	31%	54%	0%	15%	100% (98)
Non-Receiving School	12%	55%	1%	32%	100% (85)
Total	22%	54%	1%	23%	100% (183)

Chi Square = 13.935 With 3 D.F. Significance = .0030

TABLE 54 TEACHER'S CHOICE OF SCHOOL RACIAL COMPOSITION BY TEACHER'S RECEIVING SCHOOL STATUS

	Ideal School Racial Composition					
Teacher's Receiving School Status	All White School	Mostly White	Half White Half Non-White	Mostly Non-White	No Preference	Total
Receiving School	8%	64%	14%	1%	13%	100% (98)
Non-Receiving School	5%	24%	35%	4%	32%	100% (85)
Total	7%	45%	24%	2%	22%	100% (183)

Chi Square = 36.087 With 4 D.F. Significance = .0000

Whereas 72% of receiving school teachers prefer an all white or mostly white school racial composition, only 29% of non-receiving school teachers prefer such settings. Clearly, receiving school teachers overwhelmingly prefer segregated conditions. Non-receiving school teachers are less likely to have a preference as to racial composition, and when they do it is mostly likely to be for desegregated conditions (35% for half white and half non-white). Thus, while receiving school teachers are being asked to assume the task of educating lower socio-economic bused minority students, they are significantly more likely to prefer all white Anglo-Saxon higher socio-economic climate schools. Such disparities undoubtedly exert an influence on the experience of the bused black student and will determine, in part, his perception of the interracial climate of the receiving school.

Differences in attitudes discussed in the previous paragraph should exert an effect on the degree to which teachers perceive the quality of interracial relationships; i.e., on the degree to which they perceive their schools interracial climate as being cordial and accepting. If a teacher prefers to teach all white, anglo-saxon, higher socio-economic level students, that teacher is likely to perceive a school setting in which minority students are bused through court order to achieve desegregation, as extremely frustrating. Frustrations such as these certainly will color the teacher's perceptions of the degree of interracial acceptance. Table 55 presents data for teachers' perceptions of the degree of racial and ethnic cooperation in their schools (Question 43b, Form C). A significantly greater proportion of receiving school teachers perceive the level of interracial and ethnic cooperation in their schools to be poor. Teachers' attitudes toward school busing policies are also influenced by the setting in which they teach. Table 56 presents data for teachers' reponses to busing policy preferences (Question 20, Form C). Receiving school teachers are significantly less likely to be in favor of busing both white and black students and most likely to favor busing only to the students' neighborhood school. Receiving school teachers favor a busing policy that would make the smallest amount of change in terms of school desegregation.

If all of the differences in receiving and non-receiving school teacher's attitudes examined in the last two paragraphs are as substantively significant as they are statistically, teachers might be expected to appraise and evaluate their minority students differently. Teachers were asked to respond to questions 10 and 11 on Form C with reference to the minority students they taught. Table 57 presents data for the relationship between teacher ratings of minority student academic ability and teacher's receiving school status. Results in Table 57 are statistically significant. Receiving school teachers are much more likely to

TABLE 55 TEACHER'S PERCEPTIONS OF RACIAL AND ETHNIC COOPERATION BY TEACHER'S RECEIVING SCHOOL STATUS

Teacher's Receiving School Status	Good Racial and Ethnic Group Cooperation	Poor Racial and Ethnic Group Cooperation	Total
Receiving School	61%	39%	100% (98)
Non-Receiving School	83%	17%	100% (85)
Total	72%	28%	100% (183)

Chi Square = 10.270 With 1 D.F. Significance = .003

TABLE 56 TEACHER'S CHOICE OF SCHOOL BUSING POLICY BY TEACHER'S RECEIVING SCHOOL STATUS

Teacher's Receiving School Status	Bused Only To Neighborhood School	Bused Only To Relieve Overcrowding	Non-White Bused to Achieve Racial Balance	Both White And Non-White Bused to Achieve Racial Balance	Total
Receiving School	60%	24%	4%	12%	100% (98)
Non-Receiving School	47%	27%	2%	24%	100% (85)
Total	54%	25%	3%	18%	100% (183)

Chi Square = 8.510 With 3 D.F. Significance = .034

TABLE 57 TEACHER RATINGS OF MINORITY STUDENT ACADEMIC ABILITY BY TEACHER'S RECEIVING SCHOOL STATUS

Teacher's Receiving School Status	Academic Ability Rating					
	Excellent	Good	Average	Fair	Poor	Total
Receiving School	19%	14%	45%	28%	12%	100% (51)
Non-Receiving School	12%	42%	32%	11%	3%	100% (59)
Total	7%	29%	38%	19%	7%	100% (110)

Chi Square = 33.730 With 4 D.F. Significance = .0000

give lower academic ratings for the minority students they teach. Whereas receiving school teachers rated 15% of their minority students as excellent or good, non-receiving school teachers rated 35% of their minority students in these categories. Table 58 presents data for the relationship between teacher's receiving school status and teacher ratings of minority student motivation and effort. Again, differences are statistically significant. Receiving school teachers are much more likely to view minority students as lacking in motivation and not making an appropriate effort to master subjects. Non-receiving school teachers are more likely to view their minority students as adequately motivated, making as much of an effort as others. Results of Tables 57 and 58 coupled with information from other research on the effects of teacher's expectations on student academic performance, indicates the differential in teacher's evaluations of academic ability and motivation be considered as a primary candidate to explain differences in bused and non-bused minority student achievement.

From the examination of the relationship between the type of school at which the teacher is employed (receiving and non-receiving) and selected attitudinal items from Questionnaire Form C for teachers, it is concluded that teachers differ significantly in the two settings. Receiving school teachers are more likely to evaluate school administration leadership as ineffective and staff relations in their school as uncooperative. In addition, receiving school teachers prefer to teach mostly white, anglo-saxon, higher socio-economic students, favor busing policies that restrict busing to neighborhood schools and are more likely to perceive racial and ethnic relations in their school as non-cooperative. Finally, receiving school teachers are more likely to rate minority students as having less academic ability and less motivation than minority students rated by non-receiving school teachers. The major conclusion of this section is that significant differences do exist between the attitudes and expectations of receiving school teachers and non-receiving school teachers; and that these differences are likely candidates to explain achievement performance differences between bused and non-bused minority students.

D. School Climates of Interracial Acceptance

In addition to the importance of minority student attitudes toward school desegregation for subsequent achievement performance, the degree of interracial acceptance or interracial hostility at school may contribute significantly to the experiences and behavior of minority students. Two approaches are utilized to measure interracial climates in

TABLE 58 TEACHER RATINGS OF MINORITY STUDENT EFFORT BY TEACHER'S RECEIVING SCHOOL STATUS

Teacher's Receiving School Status	Student Effort Rating					
	Excellent	Good	Average	Fair	Poor	Total
Receiving School	1%	14%	32%	38%	15%	100% (51)
Non-Receiving School	4%	31%	43%	16%	6%	100% (59)
Total	3%	23%	38%	26%	10%	100% (110)

Chi Square = 21.85 With 4 D.F. Significance = .0000

this study. The first approach combines responses of teachers and white students to selected items into an index of interracial acceptance. Details on the construction of this index are found in Appendix A. This approach attempts to measure the quality of the interracial climate "objectively." Dividing the index score at the median and crosstabulating with receiving school status produces the distribution presented in Table 59. While the number of schools in each category is small and no attempt has been made to estimate the statistical significance of this distribution, the trend is clear. A smaller proportion of receiving schools have positive index scores, indicative of interracial acceptance. Receiving school interracial climates are predominantly hostile; non-receiving school climates are predominantly accepting. Due to the method of index construction, the measure of interracial climate under consideration here is extremely relative.

TABLE 59 INDEX SCORES FOR SCHOOL INTERRACIAL CLIMATE BY RECEIVING/NON-RECEIVING SCHOOL STATUS

School Status	Index Score of Interracial Climate		
	Positive (Acceptance)	Negative (Hostility)	Total
Receiving School	20%	80%	100% (5)
Non-Receiving School	67%	33%	100% (6)
Total	46%	54%	100% (11)

The second measure of interracial climate used in this study attempts to tap a subjective dimension, by considering the perceptions of minority students. Regardless of the "objective" interracial climate, it is the individual minority student's perception of that climate, whether it corresponds to an objective measure or not, that will exert the greatest effect on that student's subsequent attitude formation and educational experience. This second measure is derived from a factor analysis of selected items (see Appendix A) and represents that factor identified as student perception of school interracial climate. Data for this factor, cross-tabulated with student busing status, are presented in Table 60. While students perceptions are not uniform, certain patterns are present. Bused students are more likely to perceive their interracial climate as hostile than non-bused students. Non-bused student perceptions of interracial cliamte are significantly more positive, indicating an interracial climate of warmth and acceptance. Whether these differences exert a significant effect on achievement performance will be explored in the next chapter.

The goal of this chapter has been to present data for the second research objective of this study, viz., to determine majority and minority student attitudes toward busing and school desegregation, and to determine the degree of interracial acceptance in Waco schools. Bused and non-bused black student attitudes are remarkably similar. The majority of black students do not view busing positively although they are in favor of school desegregation and integration. The majority of white students are also in favor of school desegregation but are overwhelmingly critical of busing to achieve it. White students at receiving schools are even more critical of busing and are generally less favorable toward school integration than white students at non-receiving schools. Teachers at receiving schools are more likely to rate minority students as possessing less academic ability and less motivation to succeed than teachers at non-receiving schools. Receiving school teachers are generally less accepting of busing as a means to achieve school desegregation. Finally, objective and subjective measures of a schools interracial climate reveals the majority of receiving schools to have hostile interracial climates (represented by the combined response of teachers and white receiving school students); climates which bused students are less likely to perceive as accepting. In the following chapter, multivariate analyses of these and other factors are presented, to explain the achievement performance differences described in Chapter III.

TABLE 60 MINORITY STUDENT PERCEPTION OF SCHOOL INTERRACIAL CLIMATE BY RESPONDENT'S BUSING STATUS

Respondent's Busing Status	Factor Scores - Perception of Interracial Climate				
	Interracial Acceptance		Interracial Hostility		
	High Positive	Positive	Negative	High Negative	Total
Bused Student	52%	36%	9%	3%	100% (54)
Non-Bused Student	76%	19%	5%	0%	100% (62)
Total	65%	26%	7%	2%	100% (116)

Chi Square = 7.798 With 3 D.F. Significance = .0504

CHAPTER V

DETERMINANTS OF MINORITY STUDENT ACHIEVEMENT PERFORMANCE

The third objective of this research is to identify and evaluate major determinants of minority student achievement performance. In particular, this project seeks to identify the effects of student self-concept, attitudes toward busing and interracial climate of acceptance on changes in achievement performance of bused and non-bused black students. Correlation and regression analysis is utilized to evaluate the contribution of independent variables to variance in the dependent variable with all other test factors controlled. After identifying major determinants of bused minority student achievement, and the achievement performance of non-bused minority students, a summary of the most important factors will be presented.

A. Bused Student Achievement

In intercorrelation matrix for all variables, scales and indices theoretically relevant to the achievement of bused minority students may be found in Appendix F. Table 61 presents the results of separate regressions run for each of the dependent variables used to measure student achievement. Coefficients in the table are standarized regression coefficients which have been summed to show the total effect of non-interval scale parent variables (Lyons, 1971). Coefficients under X_{16} in the table are the relative effects of the independent factors on the dependent variablesof California Achievement Test Math Scores, 1973. From the bottom of the table it is observed that $R^2 = .590$, or that 59% of the variance in Math Scores for bused students is explained by the independent factors in the table. The value of .01 for F indicates the level of significance attained by the F ratio. As expected, measured intelligence (X_{15}) exerts the largest effect on math achievement scores. The relationship is positive, indicating students with higher intelligence have higher math scores. The next two most important variables are parental educational encouragement

TABLE 61 MULTIPLE REGRESSION EQUATIONS FOR ACHIEVEMENT PERFORMANCE VARIABLES FOR BUSED MINORITY STUDENTS

Independent Variables	Dependent Variables					
	X_{16}	X_{17}	X_{18}	X_{19}	X_{20}	X_{21}
X_1	.169	.065	----	.135	.043	----
X_2	.117	.127	.158	.100	.080	----
X_3	.137	----	.121	----	----	----
X_4	.030	.061	.053	----	.083	.012
X_5	.027	.043	.037	.053	.081	.085
X_6	----*	----	.091	----	----	.134
X_7	-.123	-.162	-.190	-.198	-.215	-.253
X_8	----	.203	----	----	.158	----
X_9	.165	.158	.182	.088	.185	.194
X_{10}	----	.074	.139	.169	.240	.167
X_{11}	----	.131	.011	----	.179	.025
X_{12}	.024	.010	.065	----	.083	.146
X_{13}	.109	----	.082	.175	----	.147
X_{14}	.084	.120	.061	.308	.109	.097
X_{15}	.461	.640	.631	.206	.285	.534
R	.768	.842	.861	.635	.683	.802
R^2	.590	.709	.741	.403	.467	.643
F	.01	.01	.01	.05	.05	.01

TABLE 61 - Continued

* = coefficient below the value of .010

Independent Variables

X_1 = Parental Educational Encouragement
X_2 = Parental Authority Structure
X_3 = Parental Discipline and Socialization Technique
X_4 = Parental Socio-Economic Status
X_5 = Respondent's Educational Expectations
X_6 = Sex of Respondent
X_7 = Racial Prejudice Scale
X_8 = School Socio-Economic Climate
X_9 = Self-Concept Scale
X_{10} = Integration Attitude Scale
X_{11} = Busing Attitude Scale
X_{12} = School Educational Climate
X_{13} = School Interracial Climate (Objective)
X_{14} = Respondent Perception of Interracial Climate (Subjective)
X_{15} = Measured Intelligence

Dependent Variables

X_{16} = Math Scores, 1973
X_{17} = Reading Scores, 1973
X_{18} = Battery Scores, 1973
X_{19} = Math Score Change, 1971-1973
X_{20} = Reading Score Change, 1971-1973
X_{21} = Battery Score Change, 1971-1973

(X_1) and respondent's self-concept (X_9). Parental discipline and socialization techniques (X_3) is the next most important variable to explain bused student math achievement. The children of parents who show an interest in their child's education, ask questions about school work and life, who actively encourage their children to continue their education, who explain parental decisions and use psychological rather than physical types of discipline have higher math achievement scores. While there is not room to comment on all of the factors, two more variables need to be mentioned. A moderate effect on math achievement is exerted by respondent's racial prejudice score (X_7). The negative sign before the coefficent indicates more highly prejudiced students have lower math scores. The other variable about which some comment is in order is the socio-economic climate of the school (X_8). The relationship is so weak that it fell below the .010 inclusion level value. Glancing ahead in the table, one observes that the socio-economic climate of the school is a significant determinant of reading scores (X_{17}) but not math scores (X_{16}). The Coleman Report (1966) which produced great impetus for a discussion of school socio-economic climate used reading test scores as measures of achievement.

The second column in the table presents regression coefficients for reading achievement scores in 1973 (X_{17}). 70.9% of the variance in reading achievement scores among bused students is explained by the factors in the table. Again, measured intelligence (X_{15}) exerts the largest effect on reading achievement, followed by school socio-economic climate (X_8). This finding is consistent with Coleman Report (1966) data. The next two most important factors for the explanation of reading achievement scores are the respondent's racial prejudice (X_7) and self-concept (X_9). Bused students with low amounts of racial prejudice and positive self-concepts tend to have higher reading achievement. The next most important factor is the respondent's attitude toward busing (X_{11}). Bused students with positive attitudes toward busing manifest higher reading achievement scores. Busing attitude has no effect, however, on math scores (X_{16}). A moderate effect is exerted by the respondent's subjective perceptions of the school's interracial climate (X_{14}). Perceptionsof the interracial climate as accepting are associated with higher reading achievement scores. The objective measure of interracial climate (X_{13}) does not affect reading scores although it does exert some influence on math scores (X_{16}).

The third column of Table 61 gives the standardized regression coefficients for the dependent variable of total California Achievement Test Battery scores, 1973. As expected, measured intelligence (X_{15}) again explains the greatest amount of variance in total battery scores of bused minority students. Respondent's racial prejudice (X_7) and self-concept (X_9) are the next most important determinants of battery scores. Parental authority structure (X_2) and integration attitudes (X_{10}) are next. Students from families with a democratic authority structure and with positive attitudes toward integration have higher test battery scores. Both objective (X_{13}) and subjective (X_{14}) measures of interracial climate exert a weak but significant effect on battery scores. School socio-economic climate (X_8) has dropped out of the equation. The most consistent determinants for all three measures of achievement in 1973 are measured intelligence (X_{15}), racial prejudice (X_7) and self-concept (X_9). Generally speaking, bused students with higher intelligence, positive self-concepts and less racial prejudice have higher achievement test scores.

Of course, the achievement scores of bused students in 1973 represents only one period in time and may not give a true picture of the achievement changes of bused students. The last three columns in Table 61 present regression coefficients for math, reading and battery score changes between 1971 and 1973, the period in which these students have been bused. Column four gives coefficients for the dependent variable of math score change from 1971-1973. The factor that exerts the greatest effect on changes in math scores is the perceived interracial climate (X_{14}). Bused students who have positive perceptions of accepting interracial climate have less of a decline in math scores. Bused students who have negative perceptions of school interracial climate show the greatest decline in math scores. The second most important factor is measured intelligence (X_{15}) followed by racial prejudice (X_7) and the objective measure of school interracial climate (X_{13}). Bused students are likely to show less decline in their math scores only if their preceptions of the interracial climate are positive, if the interracial climate is actually positive and accepting, if they have little racial prejudice, and if they have higher intelligence.

For the dependent variable of changes in reading scores (X_{20}), a slightly different picture emerges. Measured intelligence (X_{15}) has the largest effect on reading score change followed by integration attitudes (X_{10}), racial prejudice (X_7) and self-concept (X_9). Bused students who show the greatest loss in reading achievement scores are those who are lower in intelligence, have less favorable attitudes toward integration, have greater racial prejudice and less favorable self-concepts. School socio-economic status (X_8) exerts a moderate effect on changes in bused student reading achievement scores, with minority students bused to higher socio-economic climate schools showing smaller reading scores declines. Perceived interracial climate (X_{14}) exerts only a weak effect on reading score change.

The final column in Table 61 presents regression coefficients for the dependent variable measuring the change in total battery scores between 1971 and 1973 (X_{21}).

Measured intelligence (X_{15}) has the greatest effect on battery score changes followed by racial prejudice (X_7), self-concept (X_9) and integration attitudes (X_{10}). Bused students with smallest losses in test battery scores are those with higher measured intelligence, less racial prejudice, positive self-concept and attitudes favorable to integration. School educational climate (X_{12}) and school interracial climate (X_{13}) also exert a moderate effect on changes in battery scores, with smaller achievement losses coming from situations in which the educational climate of the school is encouraging and supportive, and the interracial climate is accepting.

The relative strengths of independent factors vary with different measures of achievement. Nevertheless several factors consistently exercise strength across all measures of achievement. The most important of these factors is measured intelligence, which exercises an effect on all 6 achievement measures, and exercises the largest effect on 5 of the 6 measures. The second most important factor for all dependent variables is the respondent's racial prejudice level. Consistently, higher achievement scores are associated with lower levels of racial prejudice. Self-concept is next in importance, followed by student perception of the interracial climate. Two additional variables exercise effects for all of the achievement measures; parental authority structure and respondent's educational expectations. Other variables which exercise an effect on 5 of the 6 measures of achievement include school interracial climate, school educational climate, school socio-economic climate, parental socio-economic status and parental educational encouragement.

To summarize this section, it is observed that while data from Chapter III indicate that bused students on the average did less well than non-bused students on achievement tests after the two year period of busing, the factors identified above determine the actual achievement performance for each bused student. Bused minority students will not show a large decline in achievement, indeed may even show gains in achievement scores, only to the extent that they have a combination of high intelligence, little racial prejudice, positive self-concept, come from families with democratic authority structures, manifest high educational expectations, perceive their school's interracial climate as accepting, attend schools with higher educational and socio-economic climates and come from families of higher socio-economic status that encourage educational performance.

B. Non-Bused Student Achievement

This section investigates the determinants of achievement for non-bused minority students. An intercorrelation matrix for all variables, scales and indices theoretically relevant to the achievement of non-bused minority students may be found in Appendix F. Table 62 presents the results of separate regressions for each of the dependent achievement variables. Generally speaking, less variance is explained among non-bused students than among bused students, and F ratio levels are less significant. For the dependent variable of math achievement scores, intelligence (X_{15}), school educational climate (X_{12}), respondent's perceptions of school interracial climate (X_{14}) and busing attitudes (X_{11}) exercise the largest effects, in that order. Non-bused students with higher intelligence, perceptions of an accepting interracial climate, favorable attitudes toward busing and attendance in achools with high educational climates have higher math achievement test scores.

For the dependent variable of reading scores, intelligence (X_{15}) is again the strongest factor, followed by parental socio-economic status (X_4) and parental discipline and socialization techniques (X_3). Respondent perception of school interracial climate (X_{14}) also makes a moderate contribution to reading achievement. For both math score and reading score dependent variables, school socio-economic climate (X_8) exercises a moderate effect. Looking across the table, school socio-economic climate has an effect on all measures of achievement for non-bused minority students. Non-bused students have higher reading achievement scores to the extent that they have higher intelligence, come from higher socio-economic level families that have utilized rational explanations and psychological discipline techniques and have favorable perceptions of their school's interracial climate.

For the dependent variable of total battery scores, 1973, measured intelligence (X_{15}) again exerts the strongest effect. The next strongest determinants are parental socialization techniques (X_3), respondent's educational expectations (X_5) and school socio-economic status (X_8). Non-bused students are more likely to have higher battery scores if they have higher intelligence, have been raised in a family which uses psychological rather than physical punishment and discipline, have high educational expectations and attend a higher socio-economic climate school.

For the dependent variables of changes in achievement scores (X_{19}, X_{20}, X_{21}), two factors exercise a strong consistent effect: measured intelligence (X_{15}) and respondent perception of school interracial climate (X_{14}). Higher intelligence non-bused minority students who perceive the interracial climates of their schools as accepting, show the smallest declines in achievement scores; some, even show gains. Other significant factors exercising effects on achievement score changes are parental authority structure (X_2), school educational climate (X_{12}) and busing attitudes (X_{11}).

TABLE 62 MULTIPLE REGRESSION EQUATIONS FOR ACHIEVEMENT PERFORMANCE VARIABLES FOR NON-BUSED MINORITY STUDENTS

Independent Variables	Dependent Variables					
	X_{16}	X_{17}	X_{18}	X_{19}	X_{20}	X_{21}
X_1	----	.017	.038	.014	----	.035
X_2	.075	----	.080	----	.177	.141
X_3	.096	.185	.152	----	.121	.086
X_4	.051	.224	----	----	.191	----
X_5	.040	.051	.124	.069	.084	.012
X_6	.032	-.029	.025	.117	.109	----
X_7	-.054	----	-.095	-.105	-.018	-.110
X_8	.126	.114	.115	.037	.072	.093
X_9	.048	.115	.091	.033	.124	.032
X_{10}	----	.053	----	----	----	.064
X_{11}	.166	.117	.077	.201	----	.141
X_{12}	.184	----	.046	.204	.079	.105
X_{13}	----	.089	----	----	.158	.099
X_{14}	.171	.126	.055	.226	.244	.206
X_{15}	.445	.551	.466	.353	.485	.508
R	.634	.650	.653	.588	.640	.647
R^2	.402	.423	.426	.347	.409	.418
F	.10	.10	.05	.10	.10	.05

TABLE 62 - Continued

* = coefficient below the value of .010

Independent Variables

X_1 = Parental Educational Encouragement
X_2 = Parental Authority Structure
X_3 = Parental Discipline and Socialization Technique
X_4 = Parental Socio-Economic Status
X_5 = Respondent's Educational Expectations
X_6 = Sex of Respondent
X_7 = Racial Prejudice Scale
X_8 = School Socio-Economic Climate
X_9 = Self-Concept Scale
X_{10} = Integration Attitude Scale
X_{11} = Busing Attitude Scale
X_{12} = School Educational Climate
X_{13} = School Interracial Climate (Objective)
X_{14} = Respondent Perception of Interracial Climate (Subjective)
X_{15} = Measured Intelligence

Dependent Variables

X_{16} = Math Scores, 1973
X_{17} = Reading Scores, 1973
X_{18} = Battery Scores, 1973
X_{19} = Math Score Change, 1971-73
X_{20} = Reading Score Change, 1971-73
X_{21} = Battery Score Change, 1971-73

While the relative strengths of factors varies with different measures of achievement, several factors consistently exercise strength across all measures of achievement. The most important of these is measured intelligence (X_{15}) followed by student perception of school interracial climate (X_{14}). Other significant factors include respondent's educational expectations (X_5), school socio-economic climate (X_8) and self-concept (X_9). Variables which exercise an effect on 5 of the 6 achievement measures include parental socialization technique (X_3), sex of respondent (X_6), racial prejudice scale (X_7), busing attitude scale (X_{11}) and school educational climate (X_{12}).

To summarize this section on the determinants of non-bused minority student achievement, it is observed (from Chapter III) that non-bused students had the smallest declines in achievement scores. Many showed gains. Non-bused minority students will show small declines, and perhaps gains in achievement scores, to the extent that they have a combination of high intelligence, positive perceptions of their school's interracial climate, high educational expectations, positive self-concepts and attend higher socio-economic climate schools. Other conditions that encourage small declines in achievement include rational and psychological parental socialization techniques, low racial prejudice levels, positive attitudes toward busing and attendance at a school with an encouraging educational climate.

C. Self-Concept and Measured Intelligence

If the four most important determinants of bused student achievement scores are listed (measured intelligence, racial prejudice, self-concept and respondent's educational expectations) and are compared with the four strongest determinants of non-bused student achievement (measured intelligence, perception of interracial climate, school socio-economic climate and self-concept) two factors are found to be included in both lists: self-concept and measured intelligence. Table 63 presents the results of separate regressions run for the dependent variables of self-concept and measured intelligence for bused and non-bused minority students. If the logic of the causal priorities in regressing self-concept and measured intelligence on the independent factors is valid then it may be observed that the independent factors considered in this study exert a significant effect on both self-concept (X_9) and measured intelligence (X_{15}). For bused students, the two most significant factors exerting pressure on self-concept are the two measures of school interracial climate (X_{13} and X_{14}). Perceived interracial climate also exercises the greatest effect on measured intelligence (X_{15}). For non-bused students, respondent's educational expectations

TABLE 63 MULTIPLE REGRESSION EQUATIONS FOR SELF-CONCEPT AND MEASURED INTELLIGENCE OF BUSED AND NON-BUSED MINORITY STUDENTS

Independent Variables	Bused Students		Non-Bused Students	
	X_9	X_{15}	X_9	X_{15}
X_1	.136	.101	.314	.120
X_2	.223	.126	.169	.326
X_3	.011	.104	.181	.126
X_4	.114	.122	.316	.252
X_5	.147	.260	.536	.561
X_6	-.117	.213	-.101	----
X_7	-.044	-.185	-.023	----
X_8	.082	.077	----	.155
X_{10}	.083	.058	.250	----
X_{11}	.093	.124	.524	.086
X_{12}	.124	.196	.169	.140
X_{13}	.298	.100	.215	.277
X_{14}	.396	.404	.067	.484
X_9	----	.156	----	.312
X_{15}	.193	----	.475	----
R	.693	.790	.716	.747
R^2	.480	.624	.512	.558
F	.05	.01	.05	.05

TABLE 63 - Continued

* = coefficient below the value of .010

Independent Factors

X_1 = Parental Educational Encouragement
X_2 = Parental Authority Structure
X_3 = Parental Discipline and Socialization Technique
X_4 = Parental Socio-Economic Status
X_5 = Respondent's Educational Expectations
X_6 = Sex of Respondent
X_7 = Racial Prejudice Scale
X_8 = School Socio-Economic Climate
X_{10} = Integration Attitude Scale
X_{11} = Busing Attitude Scale
X_{12} = School Educational Climate
X_{13} = School Interracial Climate (Objective)
X_{14} = Respondent Perception of Interracial Climate (Subjective)

Dependent Variables

X_9 = Self-Concept Scale
X_{15} = Measured Intelligence

(X_5) and busing attitudes (X_{11}) exercise the largest effect on self-concept, with educational expectations (X_5) having the greatest effect on measured I.Q. While the causal ordering here is debatable these equations were included to provide a fuller picture of the effects of the independent factors, and to indicate the importance of school interracial climate for bused students. Due to the unresolved debate concerning the proper ordering of motivational, intellectual and background variables (Bloom, 1964; Hauser, 1971; Rehberg, Schafer and Sinclair, 1970; and Turner, 1964), no attempt will be made to construct a path model of the variables under consideration. Instead, the path analytic notation will be used to evaluate those factors making the greatest direct contribution to minority student achievement and achievement change.

D. Selected Determinants of Achievement For Bused Minority Students

One final method of evaluating determinants of bused student achievement involves the use of path coefficients and correlation coefficients to observe and compare direct versus indirect effects of variables. Factors which have a proportionately larger direct effect on the dependent variable offer the greatest opportunity for manipulation and possible change. Factors which have a proportionately large indirect effect, owe their strength to their relationship to other factors and do not present as great a potential for manipulation. In the following tables, the direct effect is defined as the path coefficient. The total indirect effect is the correlation (r) between an independent variable and a dependent variable minus the direct effect. The indirect effect is itself a combination of the effect of one variable through paths of other variables (in a causal model) and the effects due to correlation with other variables (the "joint" effect). Table 64 presents direct and indirect effects for all of the independent factors on the three dependent variables of math, reading and battery scores for bused students in 1973. If an independent variable contributes a larger direct effect, it is concluded to exercise primarily a direct effect. Thus far the dependent variable of battery scores, direct effects are exercised by parental authority structure (X_2), parental socialization technique (X_3), integration attitudes (X_{10}), school interracial climate (X_{13}) and measured intelligence (X_{15}). For the three dependent variables in the table, four factors exercise primary direct effects: parental authority structure, parental socialization technique, school interracial climate and measured intelligence. Of these four, the variable most easy to manipulate is school interracial climate.

TABLE 64 DIRECT AND INDIRECT EFFECTS ON ACHIEVEMENT TEST VARIABLES FOR BUSED MINORITY STUDENTS, 1973

Independent Factors	Effects on Dependent Variables					
	Math Scores		Reading Scores		Battery Scores	
	Direct	Indirect	Direct	Indirect	Direct	Indirect
X_1	.169	.131	.065	.105	----	----
X_2	.117	.163	.127	.073	.158	.112
X_3	.137	-.017	----	----	.121	.029
X_4	.030	.050	.061	.089	.053	.087
X_5	.027	.293	.043	.297	.037	.303
X_6	----	----	----	----	.091	.021
X_7	-.123	.413	-.162	-.258	-.190	-.200
X_8	----	----	.203	.027	----	----
X_9	.165	.305	.158	.272	.182	.318
X_{10}	----	----	.074	.136	.139	.041
X_{11}	----	----	.131	.309	.011	.369
X_{12}	.024	.286	.010	.280	.065	.255
X_{13}	.109	.021	----	----	.082	.068
X_{14}	.084	.336	.120	.110	.061	.339
X_{15}	.461	.239	.640	.110	.631	.149

TABLE 64 - Continued

X_1 = Parental Educational Encouragement
X_2 = Parental Authority Structure
X_3 = Parental Discipline and Socialization Technique
X_4 = Parental Socio-Economic Status
X_5 = Respondent's Educational Expectations
X_6 = Sex of Respondent
X_7 = Racial Prejudice Scale
X_8 = School Socio-Economic Climate
X_9 = Self-Concept Scale
X_{10} = Integration Attitude Scale
X_{11} = Busing Attitude Scale
X_{12} = School Educational Climate
X_{13} = School Interracial Climate (Objective)
X_{14} = Respondent Perception of Interracial Climate (Subjective)
X_{15} = Measured Intelligence

Table 65 presents direct and indirect effects for the three dependent variables of math score changes, reading score and battery score changes for bused students. A larger number of variables exercise direct effects, thereby offering a larger number of opportunities for social intervention and manipulation. Variables exercising direct effects for two or more of the three dependent variables include parental authority structure (X_2), racial prejudice (X_7), integration attitudes (X_{10}), school educational climate (X_{12}), school interracial climate (X_{13}) and measured intelligence (X_{15}). With the exception of parental authority structure and measured intelligence, all of these factors are fairly amenable to programs designed for change. Thus, some of the negative effects of busing for the achievement performance of bused minority students might be altered and offset.

TABLE 65 DIRECT AND INDIRECT EFFECTS ON CHANGES IN ACHIEVEMENT SCORES FOR BUSED MINORITY STUDENTS

Independent Factors	Effects on Dependent Variables					
	Math Score Change		Reading Score Change		Battery Score Change	
	Direct	Indirect	Direct	Indirect	Direct	Indirect
X_1	.135	.185	.043	.067	----	----
X_2	.100	-.097	.080	.020	----	----
X_3	----	----	----	----	----	----
X_4	----	----	.083	-.007	.012	.088
X_5	.053	.057	.081	.119	.085	.155
X_6	----	----	----	----	.134	-.034
X_7	-.198	-.112	-.215	-.175	-.258	-.162
X_8	----	----	.158	.042	----	----
X_9	.088	.322	.185	.175	.194	.316
X_{10}	.169	.011	.240	.130	.167	.063
X_{11}	----	----	.179	.271	.025	.375
X_{12}	----	----	.083	.067	.146	.114
X_{13}	.175	-.015	----	----	.147	.053
X_{14}	.308	.082	.109	.111	.097	.283
X_{15}	.206	.274	.285	.155	.534	.146

TABLE 65 - Continued

X_1 = Parental Educational Encouragement
X_2 = Parental Authority Structure
X_3 = Parental Discipline and Socialization Technique
X_4 = Parental Socio-Economic Status
X_5 = Respondent's Educational Expectations
X_6 = Sex of Respondent
X_7 = Racial Prejudice Scale
X_8 = School Socio-Economic Climate
X_9 = Self-Concept Scale
X_{10} = Integration Attitude Scale
X_{11} = Busing Attitude Scale
X_{12} = School Educational Climate
X_{13} = School Interracial Climate (Objective)
X_{14} = Respondent Perception of Interracial Climate (Subjective)
X_{15} = Measured Intelligence

CHAPTER VI

SUMMARY AND CONCLUSIONS

A brief summary and conclusions for each of the major research objectives are presented in this chapter as well as several limitations that need to be taken into account in the interpretation of the study findings.

A. Achievement Score Change

The first objective of this research is to ascertain whether court ordered busing of minority group students in Waco, Texas, has increased, decreased, or not affected the achievement levels of bused students compared with non-bused students. From the review of literature on studies in this area, contradictory findings were observed. While some studies suggest increases in achievement accompany bused minority students (East Harlem Project, 1962; Syracuse City School District, 1967), others report no such increases (Teele, Jackson and Mayo, 1966; Moorefield, 1967). Other literature, based on research in desegregated schools, contends minority students should be positively benefited by contact with "middle-class" white students (Katz, 1964; Katz, 1968; and Pettigrew, 1971).

Based on the results of this study, the following summary and conclusions are tended. Prior to busing, no significant differences in achievement performance were observed between minority students about to be bused to previously all white schools (a fact unknown to them or the school district at the time of testing) and minority students not to be assigned to be bused. After the passage of two years, during which time some of the minority students in this study were bused to previously all white schools, both bused and non-bused minority students showed a decline in level of achievement performance. Differences between bused and non-bused minority student achievement scores widened, with bused student averages significantly lower than non-bused student averages. T-tests reveal bused student reading scores and total battery scores to be significantly lower than those of non-bused students. While the trend for math score differences is the same, statistical significance was not reached.

In an attempt to observe whether achievement differences between bused and non-bused students were due to the effects of some other antecedent or intervening variable, respondent's sex, age, grade, measured intelligence and socio-economic status were controlled as test factors. Only measured intelligence was significantly related to any of the achievement variables. Controls for measured intelligence reduce the magnitude of differences between bused and non-bused achievement scores, but differences due to busing status remain statistically significant, with the exception of math score differences among bused and non-bused students with lower measured intelligence.

Measured intelligence, when controlled, also reduced the magnitude of differences between bused and non-bused student achievement score changes. Significant differences remained for both reading score changes and total battery score changes between bused and non-bused students. The major conclusion of this first section is that in the two year period of court-ordered busing to desegregate Waco schools, the achievement of bused minority students was seriously eroded in comparison with that of non-bused minority students. While both bused and non-bused students achieved less well at the end of the two year period, the achievement performance of bused students was significantly lower.

B. Student and Teacher Attitudes

The second objective of this research is to determine majority and minority student attitudes toward busing and the degree of interracial acceptance in Waco schools. Central to this objective are the concerns raised in the literature as to the effect of white majority students in receiving schools for bused minorities. Katz (1964) suggests a great amount of psychological stress and anxiety experienced by minority students may impair or retard their achievement performance. Such stress and anxiety may be generated by the minority students' attitudes and psychological state, by the climate of acceptance-rejection created by white students and/or receiving school teachers or a combination of all three. Thus, it was deemed important to observe the attitudes of all three (minority students, majority students and receiving school teachers) to determine the climate of interracial relationships. Aspects of this climate approximate Pettigrew's (1971) distinction between "desegregated" and "integrated" settings and may determine, in part, the achievement performance differences between bused and non-bused minority students.

Based on the results of this study, the following summary and conclusions are tended. Bused and non-bused minority student attitudes toward integration, school desegregation, classroom composition and busing are remarkably similar. While differences between bused and non-bused minority students toward busing are not statistically significant, only 9% of minority students have a positive attitude toward busing. 54% are neutral and 38% negative. Neither bused nor non-bused students view busing as a risk to health or as hindering the learning process. The lack of positive attitudes toward busing is reflected in the overwhelming support given to two alternatives to busing: upgrading substandard schools and redistributing quality teachers. While bused and non-bused students do not differ on many items the parents of these students do. 70% of the parents of non-bused students have positive appraisals of their child's school, compared with 35% of the parents of bused students. Bused and non-bused students differ most significantly on the racial composition of school desired and the degree to which they perceive their teachers to be interested in them. Non-bused students prefer integrated settings; bused students, less so. Non-bused students are more likely to perceive teacher interest. It is the conclusion of this study that busing does not contribute significantly to changes in minority student attitudes. Trends are somewhat opposite the predicted direction, with bused students having slightly less favorable attitudes toward desegregation and integration.

White receiving school students, on the other hand, do appear to have significantly different attitudes than white non-receiving school students. White receiving school students are less likely to favor integration, less likely to favor busing, less likely to perceive teacher interest, want a higher proportion of whites in the classroom, perceive greater racial prejudice in themselves and are less likely to favor school desegregation. A major conclusion of this study concerns the effects of rapid versus gradual school desegregation. Since white students in non-receiving schools have a larger proportion of minority students than receiving schools (most non-receiving schools were desegregated gradually), and since whites in non-receiving schools are significantly more positive concerning desegregation, integration and busing than whites in receiving schools, evidence is presented to show that gradual school desegregation is more beneficial to the development of friendly and cooperative interracial relations than rapid school desegregation.

Receiving school teacher attitudes also differed significantly from those of teacher's in non-receiving schools. Receiving school teachers are more likely to desire to work in schools with a high proportion of middle class, white, anglo-saxon students, more likely to view interracial relations in their school as non-cooperative and to view staff relations as less harmonious. The most significant differences occurred with ratings of minority student academic ability and motivation to learn. A significantly higher proportion of receiving school teachers rated minority students as having lower ability and less motivation than non-receiving school teachers. A major conclusion of this section is that differences in teachers' evaluations of the academic ability and effort of minority students should be considered as a primary determinant of achievement performance differences between bused and non-bused students.

Finally, the responses of teachers and white students were combined to generate a measure of the interracial climate of the school. As expected from the response differences between receiving and non-receiving school teacher and white students, the interracial climate in receiving schools was observed to be less cooperative and accepting than non-receiving school climates. To check on the validity of this measure and to provide a subjective measure of interracial climate, a factor scale of interracial climate was generated from the subjective responses of bused and non-bused minority students. Bused students scored significantly lower on the scale indicating less positive perceptions of their school's interracial climate.

C. Determinants of Achievement

The third objective of this research is to evaluate the degree to which bused student attitudes, majority student attitudes, student self-concept and the school's interracial climate determine the achievement performance of bused minority students. Based on the results of this study, the following summary and conclusions are tended. While different factors exercise relatively more or less of an effect for specific measures of achievement, several variables appear most significant for the achievement performance of bused minority students. They include measured intelligence, racial prejudice level, and self-concept. Generally speaking, bused students with higher intelligence, less racial prejudice and positive self-concepts had higher achievement scores on the 1973 California Achievement Test.

The major determinants of changes in achievement scores for bused minority students include perceived interracial climate, objective interracial climate, intelligence, self-concept and school socio-economic status. Generally speaking, bused students with higher intelligence, less racial prejudice, positive self-concepts, and favorable perception of their school's interracial climate showed smaller declines in achievement. Combining measures of achievement change with measures of 1973 achievement test scores reveals the following factors to exercise the greatest effect for bused student achievement: measured intelligence, racial prejudice level, self-concept, perception of interracial climate, parental authority structure and respondent's educational expectations. The major conclusion of this study concerning the determinants of bused minority student achievement is that bused students manifest smaller losses in achievement, even show small gains, to the extent that they have a combination of higher intelligence, little racial prejudice, positive self-concept, high educational expectations, perceive their school's interracial climate as accepting and come from families which have democratic authority structures.

For non-bused minority students, a similar set of factors determine 1973 achievement scores and changes in achievement. Major determinants include measured intelligence, perception of school interracial climate, self-concept, educational expectations and school socio-economic climate. Non-bused student achievement scores manifest less decline, even increases, to the extent that they have a combination of higher intelligence, positive self-concept, high educational expectations, perceive their school's interracial climate as accepting and attend schools of higher socio-economic climate. Almost identical factors operate to determine bused student and non-bused student achievement performance. This indicates that differentials with respect to these factors determine achievement differences. The major conclusion of this section, indeed of the whole study, is that differences in the experiences between bused and non-bused students with respect to school interracial climate, attitudes toward busing and desegregation, which in turn affect self-concept, account for bused and non-bused student achievement differences and account for the significant decline in bused student achievement.

An attempt was conducted to evaluate which factors offer the greatest potential for social scientists, school personnel and others to manipulate and change in order to alter this situation. School interracial climate, level of racial prejudice and integration attitudes consistantly exercise direct effects on bused student achievement and appear, therefore, to be most amenable to change.

The overall conclusion of this study is that the effects of busing minority students to desegregate schools are deleterious to the achievement performance of bused students. This relationship is highly influenced by the attitudes of white receiving school students and receiving school teachers so that it is difficult to know whether this study's results are the effects of busing, generally, or whether they are specific to the particulars of Waco, Texas. A limitation of this study is that only one school district was studied. Moorefield (1967) and Purl and Dawson (1971) provide support to suggest the interracial climate of receiving schools determine whether the bused student experience is negative or positive. School interracial climate depends, in part, on whether schools are desegregated rapidly or gradually. If as in Waco, busing is ordered to achieve rapid school desegregation and there is strong school and community resistance to such busing, then the results are likely to replicate the achievement declines of the bused students of this study.

BIBLIOGRAPHY

ARMOR, D.
1969 School and Family Effects on Black and White Achievement; A Re-examination of the USOE Data. Cambridge: Department of Social Relations.

BANKS, R. AND DIPASQUALE, M.
1969 A Study of the Educational Effectiveness of Integration. Buffalo: Buffalo Public School System.

BLALOCK. H. M., Jr. AND BLALOCK, A. B. (Eds.)
1968 Methodology in Social Research. New York: McGraw-Hill.

BORDUA, D. T.
1960 "Educational Aspirations and Parental Stress on College," Social Forces, pp. 262-269.

BORGATTA, E. F. and BOHRNSTEDT, G. W. (Eds.)
1969 Sociological Methodology 1969. San Francisco: Jossey-Bass.

BOUDON, R.
1968 "A New Look at Correlation Analysis." Pp. 199-235 in H. M. Blalock, Jr., and A. B. Blalock (eds.), Methodology in Social Research. New York: McGraw-Hill.

BOYLE, R. P.
1966 "The Effects of High School on Student's Aspirations," American Journal of Sociology 71:628-639.

CITY SCHOOL DISTRICT: SYRACUSE, NEW YORK
1967 "A Study of the Effects of Integration." Pp. 323-328 in U.S. Civil Rights Commission, Hearings Held in Rochester, New York, September 16-17, 1966. Washington: Government Printing Office.

COLEMAN, J. S.
1968 "The Concept of Educational Equality." Harvard Educational Review 38:7-23.
1970 "Multivariate Analysis For Attribute Data" Pp. 217-246 in E. F. Borgatta and G. W. Bohrnstedt (Eds.) Sociological Methodology, 1970. San Francisco: Jossey-Bass.

COLEMAN, J. S. Et. al.
1966 Equality of Educational Opportunity. Washington: Government Printing Office.

DAY, N. A., Et. al.
1968 "Discussion: Implementing Equal Educational Opportunity." *Harvard Educational Review*. 38:138-176.

DOUVAN, E. AND ADELSON, J.
1966 *The Adolescent Experience*. New York: John Wiley and Son.

DYER, H. S.
1968 "School Factors." *Harvard Educational Review*. 38:38-57.

EAST HARLEM PROJECT
1962 *Releasing Human Potential: A Study of East Harlem-Yorkville School Bus Transfer*. New York: City Commission on Human Rights.

ELDER, G. H., Jr.
1962 "Structural Variations in The Child Rearing Process," *Sociometry*, 25, pp. 241-256.
1963 "Parental Power Legitimation And Its Effect On The Adolescent," *Sociometry*, 26, pp. 50-65.

GARDNER, B. B.
1970 "The Effects of Bussing Black Ghetto Children in Suburban Schools." *ERIC* No. ED 048 389.

GOODMAN, S. M.
1959 *The Assessment of School Quality*. Albany: New York State Education Department.

HODGKINS, B. J. AND STAKENAS, R. G.
1969 "A Study of Self-Concepts of Negro and White Youth in Segregated Environments." *Journal of Negro Education* 38:370-377.

HOLLINGSHEAD, A. B.
1957 The Two Factor Index of Social Position. New Haven: Yale University.

KAHL, J. A.
1953 "Educational and Occupational Aspirations of the 'Common-Man' Boys," *Harvard Educational Review*.
1965 "Some Measurements of Achievement Orientation." *American Journal of Sociology*. 70:669-679.

KATZ, I.
1964 "Review of Evidence Relating to Effects of Desegregation on the Performance of Negroes." *American Psychologist*. XIX:381-399.
1968 "Academic Motivation." *Harvard Educational Review*. 38:57-65.

LAND, K.
1969 "Principles of Path Analysis." Pp. 3-37 in E. F. Borgatta (ed.), Sociological Methodology, 1969. San Francisco: Jossey-Bass.

LYONS, M.
1971 "Techniques For Using Ordinal Measures in Regression and Path Analysis." Pp. 147-171 in H. L. Costner (ed.), Sociological Methodology, 1971. San Francisco: Jossey-Bass.

MCDILL, E. L., MCDILL, M.S. AND SPREHE, J. T.
1969 Strategies For Success in Compensatory Education. Baltimore: John Hoplins Press.

MCDILL, E. L., MEYERS, E. D. AND RIGSBY, L. C.
1967 "Institutional Effects on the Academic Behavior of High School Students." Sociology of Education. 40:181-199.

MCPARTLAND, J.
1968 The Segregated Student in Desegregated Schools: Sources of Influence on Negro Secondary Students. Final Report. Baltimore: Johns Hopkins Press. ERIC No. ED 021 944.

MICHAEL, J. A.
1961 "High School Climates and Plans for Entering College." Public Opinion Quarterly. 25:585-595.

MOOREFIELD, T. E.
1967 "The Bussing of Minority Group Children In a Big City School System." Unpublished Doctoral Dissertation. Chicago: University of Chicago.

NEWCOMB, T. M.
1950 Social Psychology. New York: Holt, Rinehart and Winston.

OFFICE OF CIVIL RIGHTS, U.S. DHEW
1970 "Much Better Than They Expected." Integrated Education. 8:46-48.

PETTIGREW, T. F.
1968 "Race." Harvard Educational Review. 38:66-77.
1971 Racially Separate or Together, New York: McGraw-Hill.

POTTINGER, J. S.
1971 "HEW Enforcement of Swann." Inequality in Education. 9:6-10.

PRITCHARD, P.
1969 "Effects of School Desegregation on Student Success In Chapel Hill City Schools." *Integrated Education*.

PURL, M. C. AND DAWSON, J.
1971 *The Achievement of Pupils in Desegregated Schools*. *ERIC* No. ED 948 415.

REHBERG, R. A.
1967 "Parental Encouragement, Occupation, Education, Family Size: Artifactual or Independent Determinants of Adolescent Educational Expectations," *Social Forces*.

REHBERG, R. A., SCHAFER, W. AND SINCLAIR, J.
1970 "Toward a Temporal Sequence of Adolescent Achievement Variables." *American Sociological Review*. 35:34-48.

RICHARDSON, E.
1970 "Senate Quizzes Richardson." *Integrated Education*. 8:52-55.

ROSEN, B. C.
1956 "The Achievement Syndrome: A Psycho-Cultural Dimension of Social Stratification." *American Sociological Review*. 21:203-211.
1959 "Race, Ethnicity and The Achievement Syndrome," *American Sociological Review*, February.

ST. JOHN, N. H. AND LEWIS, R.
1971 "The Influence of School Racial Context on Academic Achievement." *Social Problems*. 19:68-79.

SCUDDER, B. T. AND JURS, S. G.
1971 "Do Bussed Negro Children Affect Achievement of Non-Negro Children." *Integrated Education*. 9:30-34.

STRODBECK, F. L.
1958 "Family Interaction, Values and Achievement." Pp. 135-194 in D. C. McClelland, et. al. *Talent and Society*. Princeton: D. Van Nostrand.

SUITS, D. B.
1957 "Use of Dummy Variables in Regression Equations." *Journal of the American Statistical Association*. 52:548-551.

TANNENBAUM, A. S. AND BACHMAN, J. G.
1964 "Structural Versus Individual Effects." *American Journal of Sociology*. LXIX:585-592.

TEELE, JE. E., JACKSON, E. AND MAYO, C.
1967 "Family Experiences in Operation Exodus," in U.S. Commission on Civil Rights, Hearings Held in Boston, Massachusetts, October 4-5, 1966. Washington: Government Printing Office.

TURNER, R. H.
1964 The Social Context of Ambition. San Francisco: Chandler Publishing.

U.S. COMMISSION OF CIVIL RIGHTS
1967 Racial Isolation in the Public Schools. 2 Vols. Washington: Government Printing Office.

U.S. SUPREME COURT
1971 Swann v. Charlotte-Mecklenburg Board of Education. 91 S. CT. 1267.

WEINBERG, M.
1970 Desegregation Research: An Appraisal. Bloomington: Phi Delta Kappa.

WILSON, A. B.
1959 "Residential Segregation of Social Classes and Aspirations of High School Boys." American Sociological Review. 24:836-845.
1967 "Educational Consequences of Segregation in a California Community." Pp. 165-206 in U.S. Civil Rights Commission, Racial Isolation in the Public Schools. Vol. II, Washington: Government Printing Office.

WOOD, B. H.
1969 "The Effects of Bussing Versus Non-Bussing on the Intellectual Functioning of Inner City, Disadvantaged Elementary School Children." Unpublished Doctoral Dissertation. Boston: University of Massachusetts.

APPENDIX A. OPERATIONAL DEFINITIONS OF SELECTED VARIABLES

The following variables are operationally defined in this appendix.

Achievement 110
Achievement Change. 110
Measured Intelligence. 111
Parental Socio-Economic Status. 111
Parental Educational Encouragement 111
Parental Authority Structure 111
Parental Socialization and Discipline Technique . 112
Respondent's Educational Expectations 112
Racial Prejudice Scale 112
Self-Concept Scale. 112
Integration Attitude Scale 113
Busing Attitude Scale. 113
Perception of Interracial Climate. 113
School Interracial Climate 113
School Socio-Economic Climate 114
School Educational Climate 114

Achievement and Achievement Change

Two measures of achievement are utilized in this study: those collected prior to the period of busing and those collected after the two year period of busing which this study covers. Achievement measures prior to the period of busing are the total math scores, total reading scores and total battery scores from the Intermediate Form of the California Achievement Test. This test was administered by Waco Independent School District personnel and student scores were processed from school records. This test was administered during the 1969-1971 school year period to successive classes of students. Nevertheless, all scores were in school records prior to court ordered busing.

Achievement measures after two years of busing are the total math scores, total reading scores and total battery scores from the Advanced Form of the California Achievement Test. This test was administered in the schools, under the direction of a research consultant for this study, during the spring of 1973.

Achievement changes were derived by simply subtracting the total math, reading and battery scores from the before period, from their respective counterparts for the 1973 period for each student.

Measured Intelligence

Measured Intelligence is defined as total I.Q. scores from the California Test of Mental Maturity administered by the Waco Independent School District as a regular part of their testing program. All scores were processed prior to the period of busing covered in this study.

Parental Socio-Economic Status

Parental Socio-Economic Status is defined as the Hollingshead Two Factor Index of Social Position (1957) which combines educational and occupational scores for father or head of household. Questions 10, 11, 12 1972 Questionnaires, Form A and B.

Parental Educational Encouragement

Kahl (1953), Bordua (1960) and Rehberg (1965) report higher achievement expectations for students from families in which parents value education sufficiently to encourage their children to continue their education beyond the high school level. Conceptually, parental educational orientation refers to the amount of encouragement parents give their children to do well in school and continue their education. Operationally, it is defined by an index which combines respondent's scores for two items: frequency of paternal encouragement (Question 18, Forms A and B) and frequency of maternal encouragement (Question 20, 1972 Questionnaires, Forms A and B). Index scores range from 1, low encouragement; to a value of 10, high encouragement.

Parental Authority Structure

Elder (1963) summarizes prior research on parental authority structure with the suggestion that the most fruitful approach should concentrate on the type of role relationship between the parent and child in the child rearing process. Elder suggests a "democratic" type of authority pattern, which allows for greater interdependence between parents and children with respect to family decision-making, is conducive to high achievement. Rehberg (1965) and Douvan and Adelson (1966) report a democratic parent-child authority pattern is more congruent with the type of child rearing process which facilitates an easy internalization of parental values. Parental authority structure is operationalized by an index which combines paternal and maternal decision-making (Question 17 and 19, 1972 Questionnaires, Forms A and B). Index scores range from the value of 1, authoritarian; to a value of 10, democratic authority structure.

Parental Socialization and Discipline Technique

Parental socialization and discipline technique is conceptually defined as the type of discipline and method of socialization a child receives while growing up. Douvan and Adelson (1966) report the use of indirect controls, i.e., psychological rather than physical discipline and rewards leads to the internalization of parental achievement values. Elder (1963) reports higher achievement among adolescents from homes in which parental power is perceived as both reasonable and rational, and in which discipline is psychological rather than physical. Parental socialization and discipline techniques is operationalized by an index combining maternal and paternal discipline techniques (Questions 17 and 20, 1971 Questionnaire Appendix C). Index scores range from a low of 1, authoritarian; to 8, democratic.

Respondent's Educational Expectations

Educational expectations are defined as the realistic expectations of a student to continue his education beyond the high school level. Research by Rehberg (1967) has provided support for the relationship between expectations and earlier formulations of achievement values (Rosen, 1956; 1959). Students with high educational expectations are also those with strong achievement values. Educational expectations are operationalized by Question 52, 1972 Questionnaire, Forms A and B.

Racial Prejudice Scale

A number of items theoretically related to a respondent's racial prejudice were submitted to factor analysis using the principal components solution to factor analysis, programmed in the Statistical Package For The Social Sciences (Nie, Bent and Hull, 1971). Items that loaded on this factor included Questions 30, 41 and 46 1973 Questionnaire, Form D. The factor scale ranges from a low of -1.286 to a high of 1.606. The mean score is .402 with a standard deviation of .710.

Self-Concept Scale

Self-concept is conceptually defined as a set of beliefs and attitudes an individual has internalized about himself and his relationship to his physical and social environment. This concept is operationalized by a factor scale which was computed on measures of self-concept utilized by the Office of Education Survey (Coleman, 1966) combined with measures of mobility attitudes (Rehberg, 1970). Individual items include measures of an individual's sense of control of his environment (Coleman, 1966:288) with measures of education, mastery and time orientation isolated by Rehberg's (1970: 36-39) analysis of material from Rosen (1956), Strodbeck (1958) and Kahl (1965). These items are Questions 28, 41-48, 50 in the 1972 Questionnaire Forms A and B. The factor scale ranges from a low of -4.947 to a high of 3.054. The mean score is .114 and the standard deviation is 1.718.

Integration Attitude Scale

Integration attitudes are defined as attitudes toward general social and racial integration in society. This concept is operationalized by a factor scale computed on Questions 31 and 38, 1973 Questionnaire, Form D. The factor scale ranges from a low of -2.528 to 2.472 with a mean score of -.018 and a standard deviation of .824.

Busing Attitude Scale

Busing attitudes are operationalized by a factor scale computed on Questions 32, 43, 44, 45 and 48 of 1973 Questionnaire, Form D. The factor scale ranges from a low of -2.124 to 1.494 with a mean of -.013 and a standard deviation of .830.

Perception of Interracial Climate

The student's perception of his school's interracial climate is operationalized by a factor scale computed for the responses of black students to Questions 28, 29, 33, 35, 52-60, 1973 Questionnaire, Form D. The factor scale ranges from a low of -1.402 to 2.884 with a mean of .271 and a standard deviation of .951.

School Interracial Climate

The objective measure of school interracial climate is operationalized by a factor scale computed for the responses of teacher and white students to the following items: Questions 26, 27, 28, 34, 38 and 39, 1972 Questionnaire A; and Questions 9, 10, 11, 13, 17 and 43 b, h, i, from 1972 Questionnaire, Form C. The factor scale ranges from a low of -5.438 to 8.741 with a mean score of .376 and a standard deviation of 2.727.

School Socio-Economic Climate

School climate is defined as the "contextual" effect of the school on the individual student's behavior. (McDill, Meyers, and Rigsby, 1967:182). Measures of the school socio-economic climate are based on aggregative characteristics of schools which are derived from data from individual student's socio-economic status. School socio-economic climate is composed of measures derived from Questions 10, 11 and 12 1972 Questionnaires, Forms A and B.

School Educational Climate

School educational climate is derived in a manner similar to school socio-economic climate and is based on aggregative measures of the educational expectations and parental educational encouragement of students in the school. Questions 18, 20 and 52, 1972 Questionnaires, Forms A and B.

APPENDIX B. MEANS, STANDARD DEVIATIONS AND PERCENTAGES OF SELECTED VARIABLES

	Bused Students (N=55)		Non-Bused Students (N=62)	
Variable Name	Mean or Percentage	Standard Deviation	Mean or Percentage	Standard Deviation
Sex of Respondent	57% Male		38% Male	
Age of Respondent	16 years	.98	16 years	.91
Educational Encouragement	57% Encouraging		69% Encouraging	
Authority Structure	32% Democratic		27% Democratic	
Socialization and Discipline Technique	46% Democratic and Rational		45% Democratic and Rational	
Educational Expectations	56% Some college		63% Some College	
Receiving School Attitudes	26% Dislike		8% Dislike	
Socio-Economic Status	26% Middle to Upper		18% Middle to Upper	
Busing Advantages	17% Personal reasons		----	
Busing Disadvantages	35% Personal reasons		----	
School Interracial Climate (Objective)	.240 Factor Scale	0.09	.489	.07
Racial Prejudice Scale	.207 Factor Scale	0.08	.578	.06
Perception of Interracial Climate (Subjective)	.209 Factor Scale	0.08	.322	.06

APPENDIX B. - Continued

Variable Name	Bused Students (N=55) Mean or Percentage	Bused Students (N=55) Standard Deviation	Non-Bused Students (N=62) Mean or Percentage	Non-Bused Students (N=62) Standard Deviation
School Socio-Economic Climate	4.830	1.75	3.750	.53
Self-Concept Scale	.065	1.69	.151	1.72
Integration Attitude Scale	- .058	0.78	.039	.64
Busing Attitude Scale	- .022	0.86	.004	.81
School Educational Climate	.058	0.60	.089	.76
Math Score, 1971	74.89	5.59	77.95	16.02
Reading Scores, 1971	81.96	7.26	84.03	13.65
Battery Scores, 1971	250.85	12.37	255.98	27.99
Measured Intelligence	86.88	14.76	93.16	14.91
Language I.Q.	85.50	13.58	94.54	14.04
Math Scores, 1973	60.96	21.96	65.73	23.77
Reading Scores, 1973	50.57	15.15	58.59	19.54
Battery Scores, 1973	200.68	55.06	223.95	63.28
Math Score Change	- 14.19	21.38	- 12.62	18.29
Reading Score Change	- 31.39	14.27	- 26.28	16.69
Battery Score Change	- 51.12	52.73	- 32.55	51.45

APPENDIX C. QUESTIONNAIRE FOR FIRST WAVE OF DATA COLLECTION, SPRING, 1971

WACO HUMAN RELATIONS COMMISSION: DROPOUT RESEARCH

PURPOSE OF THE RESEARCH

This study is being conducted by the Human Relations Commission of The City of Waco, Texas, in several area schools. The purpose of the study is to determine the level of Waco dropout rates and to understand some of the reasons as to why students drop out of school. There are no right or wrong answers to this questionnaire. No one in your school or your community will ever see your questionnaire or your responses. After we have identified your questionnaire with your student number and received your attendance records from the school, this front page will be removed and your answers will be strictly anonymous. Please answer each item to the best of your ability. By reading each item carefully and by answering each item honestly, you can personally help to make this survey a true reflection of student life.

INSTRUCTIONS

1. A number of items use the terms "mother" and "father". If you are currently living with your natural mother and father, these terms should be taken to mean your natural mother and father. If you are not currently living with your natural mother and father, then the terms should be taken to mean your stepmother, stepfather, female guardian or male guardian.

2. Most of the items in the questionnaire can be answered by placing an (X) in the parenthesis to the left of the response choice which you select as your best answer.

    A sample item would be :

    21. Which sport do you like best?

        1. ( ) Tennis
        2. (X) Football
        3. ( ) Baseball

    This answer indicates that this person likes football best.

3. A number of items contain a choice category of "other". If none of the choices fits your particular situation, place an (X) in the category marked "other", and then specify the answer which best fits you.

NAME ______________________, ______________________
(Last name) (First name)

1. How long have you lived in the greater Waco area?
    0 ( ) Less than one year
    1 ( ) One year
    2 ( ) Two years
    3 ( ) Three years
    4 ( ) Four years
    5 ( ) Five years
    6 ( ) Six years
    7 ( ) Seven years
    8 ( ) Eight years
    9 ( ) Nine or more years

2. Which of the following categories best describes your family?
    0 ( ) Both natural parents
    1 ( ) Mother only
    2 ( ) Father only
    3 ( ) Mother and stepfather
    4 ( ) Father and stepmother
    5 ( ) Grandparents
    6 ( ) Foster parents
    7 ( ) Relatives
    8 ( ) Institution
    9 ( ) Other ____________
    ____________________ (Specify)

3. Which best describes the program you are taking in school?
    0 ( ) Academic or college preparation
    1 ( ) Commercial or business
    2 ( ) General
    3 ( ) Vocational Training
    4 ( ) D.E. (Distributed Education)
    5 ( ) Other ______________________________ (Specify)

4. Who recommended this course of study to you?
    0 ( ) Parents
    1 ( ) Friends
    2 ( ) Relatives
    3 ( ) Teachers
    4 ( ) Counselors
    5 ( ) Administrators
    6 ( ) Other ______________________________ (Specify who)

5. How many brothers and sisters do you have?
    0 ( ) None
    1 ( ) One
    2 ( ) Two
    3 ( ) Three
    4 ( ) Four
    5 ( ) Five
    6 ( ) Six
    7 ( ) Seven
    8 ( ) Eight
    9 ( ) Nine or more

6. Which of the following best describes your father's occupation?
    0 ( ) Professional
    1 ( ) Owner or manager of farm
    2 ( ) Proprietor or manager
    3 ( ) Clerical, sales
    4 ( ) Craftsman
    5 ( ) Semi-skilled operator
    6 ( ) Service worker
    7 ( ) Farm laborer
    8 ( ) Unskilled laborer
    9 ( ) Unemployed
    10 ( ) Retired
    11 ( ) Other ____________
    ____
    ____
    (Specify what he does)

7. Which of the following best describes your mother's occupation?
   0 ( ) Housewife
   1 ( ) Professional
   2 ( ) Proprietor, manager
   3 ( ) Clerical, sales
   4 ( ) Semi-skilled operator
   5 ( ) Private household service
   6 ( ) Service
   7 ( ) Other ______________
   ____
   ____
   (Specify what she does)

8. How far did your father go in school?
   0 ( ) No formal education
   1 ( ) Elementary school
   2 ( ) Junior high school
   3 ( ) High school
   4 ( ) Technical or business
   5 ( ) Some college
   6 ( ) Finished college
   7 ( ) Graduate or Professional school
   8 ( ) Other ______________

9. How far did your mother go in school?
   0 ( ) No formal education
   1 ( ) Elementary school
   2 ( ) Junior high school
   3 ( ) High school
   4 ( ) Technical or business
   5 ( ) Some college
   6 ( ) Finished college
   7 ( ) Graduate or Professional School
   8 ( ) Other ______________

10. Is your oldest brother or sister currently in school?
   0 ( ) No older brother or sister
   1 ( ) Yes
   2 ( ) No

11. How far has your oldest brother or sister gone in school?
   0 ( ) No formal education
   1 ( ) Elementary school
   2 ( ) Junior High School
   3 ( ) High school
   4 ( ) Technical or business
   5 ( ) Some college
   6 ( ) Finished college
   7 ( ) Graduate or Prof. School
   8 ( ) No older brother or sister
   9 ( ) Other ______________
   ____
   (Specify)

12. Approximately what is your family's average annual income?
   0 ( ) Under $1000
   1 ( ) $1000 - 1999
   2 ( ) $2000 - 2999
   3 ( ) $3000 - 4999
   4 ( ) $5000 - 6999
   5 ( ) $7000 - 9999
   6 ( ) $10,000 - 14,999
   7 ( ) $15,000 - 24,999
   8 ( ) $25,000 or more
   9 ( ) Don't know

13. What is the major source of your family's income?
   0 ( ) Father's occupation
   1 ( ) Mother's occupation
   2 ( ) Gifts
   3 ( ) Unemployment compensation
   4 ( ) Welfare
   5 ( ) Other ______________
   ______________________ (Specify)
   6 ( ) Don't know

14. On the average, how many extra-curricular clubs and activities have you participated in this past year?
   0 ( ) None
   1 ( ) One
   2 ( ) Two
   3 ( ) Three
   4 ( ) Four
   5 ( ) Five
   6 ( ) Six
   7 ( ) Seven
   8 ( ) Eight or more

15. Generally speaking, how has your school attendance been?
    0 ( ) Very regular
    1 ( ) Fairly regular
    2 ( ) Fairly irregular
    3 ( ) Very irregular

16. Generally, when your father makes decisions which concern you or when he makes rules for you to follow, does he explain to you the reasons for the decisions or rules?
    0 ( ) He almost never explains his decisions or rules to me
    1 ( ) He once in a while explains his decisions or rules to me
    2 ( ) He sometimes explains his decisions or rules to me
    3 ( ) He usually explains his decisions or rules to me
    4 ( ) He almost always explains his decisions or rules to me

17. With regard to discipline and punishment, my mother is:
    0 ( ) Very easy
    1 ( ) Fairly easy
    2 ( ) Fairly strict
    3 ( ) Very strict

18. During the past few years or so, has your father wanted you to continue your education through high school or even beyond?
    0 ( ) Yes, he has stressed it a lot
    1 ( ) Yes, he has stressed it somewhat
    2 ( ) Yes, but he has seldom mentioned it
    3 ( ) He hasn't said one way or the other
    4 ( ) No, he would rather I not continue my education

19. Generally, when your mother makes decisions which concern you or when she makes rules for you to follow, does she explain to you the reasons for the decisions or rules?
    0 ( ) She almost always explains her decisions or rules to me
    1 ( ) She usually explains her decisions or rules to me
    2 ( ) She sometimes explains her decisions or rules to me
    3 ( ) She once in a while explains her decisions or rules to me
    4 ( ) She almost never explains her decisions or rules to me

20. With regard to discipline and punishment, my father is:
    0 ( ) Very strict
    1 ( ) Fairly strict
    2 ( ) Fairly easy
    3 ( ) Very easy

21. During the past few years or so, has your mother wanted you to continue your education through high school or even beyond it?
    0 ( ) Yes, she has stressed it a lot
    1 ( ) Yes, she has stressed it somewhat
    2 ( ) Yes, but she has seldom mentioned it
    3 ( ) She hasn't said one way or the other
    4 ( ) No, she would rather I not continue my education

22. Supposing you had the necessary abilities, grades, money, etc., how far would you really like to go in school?

0 ( ) 9th grade
1 ( ) 10th or 11th grade
2 ( ) Graduate from high school
3 ( ) Trade or technical school
4 ( ) Two years of college
5 ( ) Four years of college
6 ( ) Graduate or Professional School
7 ( ) Other ________________
____

23. Considering your grades, abilities, financial resources, etc., how far do you actually expect to go in school?

0 ( ) 9th Grade
1 ( ) 10th or 11th grade
2 ( ) Graduate from high school
3 ( ) Trade or technical school
4 ( ) Two years of college
5 ( ) Four years of college
6 ( ) Graduate or Professional School
7 ( ) Other ______________
____

24. Have you ever seriously considered dropping out of school?

0 ( ) No
1 ( ) Yes, once
2 ( ) Yes, several times
3 ( ) Yes, often

25. If the answer to the previous question is "no", continue with question numbered "26". If you have considered dropping out of school, indicate what your first and second reasons would have been. (Use the numerals "1" and "2")

0 ( ) Physical illness
1 ( ) Physical disability
2 ( ) Mentall illness
3 ( ) Mental disability
4 ( ) Behavioral difficulty
5 ( ) Academic difficulty
6 ( ) Lack of appropriate curriculum
7 ( ) Poor relationships with fellow pupils
8 ( ) Poor relationships with teachers and staff
9 ( ) Counselor's advice
10 ( ) Dislike of school experiences
11 ( ) Parental influence
12 ( ) Economic reasons
13 ( ) Employment
14 ( ) Marriage
15 ( ) Pregnancy
16 ( ) Need at home
17 ( ) Other ________________
____
________________________(Specify)

26. How many languages do you speak fluently?

0 ( ) Three or more
1 ( ) Two
2 ( ) One

27. If we said a close friend is a person who really accepts you, a person with whom you like to discuss things, and a person whom you enjoy being with; would you say that you have a friend among any of the teachers or staff at school?

0 ( ) No
1 ( ) Yes

28. Of the close friends that you have, are any of them from the student body at school?
0 ( ) No
1 ( ) Yes

29. If you answered the previous question "no", continue with the question numbered "30". If you answered the previous question "yes", then how many friends do you have among the student body at school?
0 ( ) Five or more
1 ( ) Four
2 ( ) Three
3 ( ) Two
4 ( ) One

30. Which of the following persons do you judge to have been the most influential in your life? (Check only one)
0 ( ) Parents
1 ( ) Relatives
2 ( ) Teachers
3 ( ) Clergy
4 ( ) Counselors
5 ( ) Friends
6 ( ) Administrators
7 ( ) Other ________________
____
________________________(Specify)

31. Do you have a job outside of school?
0 ( ) No
1 ( ) Yes

32. Which category best describes the time in which you work at your job?
0 ( ) Do not have a job
1 ( ) Afternoons
2 ( ) Nights
3 ( ) Afternoons and weekends
4 ( ) Other ________________
____

33. If you do have a job, how many hours per week do you work?
0 ( ) Do not have a job
1 ( ) Under 5 hours
2 ( ) 5 -10 hours
3 ( ) 10 - 15 hours
4 ( ) 15 or more hours

34. How do you usually go to and from school?
0 ( ) Walk
1 ( ) Public transportation
2 ( ) School bus
3 ( ) Parents take me
4 ( ) Friend's car
5 ( ) My own car
6 ( ) Other ________________
____

35. I feel that I am recognized as an individual in school.
0 ( ) Strongly agree
1 ( ) Agree
2 ( ) Disagree
3 ( ) Strongly disagree

36. I usually tend to get along well with my fellow students.
0 ( ) Strongly disagree
1 ( ) Disagree
2 ( ) Agree
3 ( ) Strongly agree

37. I feel that my teachers are fairly interested in me as a person.
    0 ( ) Strongly agree
    1 ( ) Agree
    2 ( ) Disagree
    3 ( ) Strongly disagree

38. I feel that the curriculum and courses in my school are not relevant to my interests.
    0 ( ) Strongly agree
    1 ( ) Agree
    2 ( ) Disagree
    3 ( ) Strongly disagree

39. Education tends to make a person more unhappy than happy.
    0 ( ) Strongly agree
    1 ( ) Agree
    2 ( ) Disagree
    3 ( ) Strongly disagree

40. At times I think I am no good at all.
    0 ( ) Strongly disagree
    1 ( ) Disagree
    2 ( ) Agree
    3 ( ) Strongly agree

41. Are you planning to follow the same type of work as your father?
    0 ( ) No
    1 ( ) Yes
    2 ( ) Don't know

42. I feel that I am a person of worth, at least on an equal plane with others.
    0 ( ) Strongly agree
    1 ( ) Agree
    2 ( ) Disagree
    3 ( ) Strongly disagree

43. A person should live mainly for today and let tomorrow take care of itself.
    0 ( ) Strongly agree
    1 ( ) Agree
    2 ( ) Disagree
    3 ( ) Strongly disagree

44. In business and industry, a person without a college education can get ahead just as fast as a person with a college education.
    0 ( ) Strongly agree
    1 ( ) Agree
    2 ( ) Disagree
    3 ( ) Strongly disagree

THANK YOU

APPENDIX D. QUESTIONNAIRES FOR SECOND WAVE OF DATA COLLECTION, SPRING, 1972

Form A	For Non-Bused Students
Form B	For Bused Students
Form C	For Teachers

THE WACO DROPOUT AND ACHIEVEMENT STUDY

Form A

This study is being conducted by the Research Development Foundation in several area schools. The purpose of the study is to understand some of the reasons as to why students drop out of school and why student achievement is higher in some schools than others. There are no right or wrong answers to the questionnaire. No one in the community will ever see your questionnaire or your responses. Please answer each item to the best of your ability. By reading each item carefully and by answering each item honestly, you can personally help to make this study a true reflection of school life.

INSTRUCTIONS

Most of the items in the questionnaire can be answered by placing an (x) in the parenthesis to the left of the response choice which you select as your best answer.

Sample Item

1. Which sport do you like best?
    1. ( ) Tennis
    2. (X) Football
    3. ( ) Baseball

This answer indicates this person likes football best.

1. Are you a male or female?
    1. ( ) Male
    2. ( ) Female

2. How old were you on your last birthday?
    1. ( ) 14 or younger
    2. ( ) 15
    3. ( ) 16
    4. ( ) 17
    5. ( ) 18
    6. ( ) 19
    7. ( ) 20
    8. ( ) 21 or older

3. How long have you lived in the greater Waco area?
    1. ( ) Less than one year
    2. ( ) One year
    3. ( ) Two years
    4. ( ) Three years
    5. ( ) Four years
    6. ( ) Five years
    7. ( ) Six years
    8. ( ) Seven or more years

4. Which of the following best describes you?
    1. ( ) American Indian
    2. ( ) Black
    3. ( ) Chicano
    4. ( ) Oriental
    5. ( ) White
    6. ( ) Other

5. How many brothers and sisters do you have altogether?
    1. ( ) None
    2. ( ) One
    3. ( ) Two
    4. ( ) Three
    5. ( ) Four
    6. ( ) Five
    7. ( ) Six
    8. ( ) Seven
    9. ( ) Eight or More

6. How many brothers and sisters do you have who are older than you?
    1. ( ) None
    2. ( ) One
    3. ( ) Two
    4. ( ) Three
    5. ( ) Four or More

7. Do you speak a language other than English outside of school? (Spanish, Polish, German, etc.)
    1. ( ) Yes, frequently
    2. ( ) Yes, occasionally
    3. ( ) Yes, rarely
    4. ( ) No

8. Who is now acting as your father? If you are adopted, consider your adoptive father as your real father.
    1. ( ) My real father, who is living at home
    2. ( ) My real father, who is not living at home
    3. ( ) My stepfather
    4. ( ) My foster father
    5. ( ) My grandfather
    6. ( ) Another relative (uncle, etc.)
    7. ( ) Another adult
    8. ( ) No one

9. Who is now acting as your mother? If you are adopted consider your adoptive mother as your real mother.
    1. ( ) My real mother, who is living at home
    2. ( ) My real mother, who is not living at home
    3. ( ) My stepmother
    4. ( ) My foster mother
    5. ( ) My grandmother
    6. ( ) Another relative (aunt, etc.)
    7. ( ) Another adult
    8. ( ) No one

Please answer all questions about your parents in terms of your answers to questions 8 and 9. In situations in which no one is now acting as mother or father, answer questions about your parents in terms of your real mother and father whether they are living or dead.

10. What work does your father do? You probably will not find his exact job listed, but check the one that comes closest. If he is now out of work or if he is retired, mark the one that he usually did. Mark only his main job if he works at more than one.

1. ( ) Technical - such as draftsman, surveyor, medical or dental technician,
   Official - such as manufacturer, officer in a large company, banker, government official or inspector, etc.
2. ( ) Manager - such as a sales manager, store manager, office manager, factory supervisor, etc.
   Proprietor or Owner - such as owner of small business, wholesale, retailer, contractor, restaurant owner, etc.
3. ( ) Clerical worker - such as bankteller, bookkeeper, sales clerk, office clerk, messenger, mail carrier, etc.
   Salesman - such as real estate salesman or insurance, etc.
   Protective Worker - such as policeman, detective, sheriff, fireman, et
4. ( ) Workman or Laborer - such as factory or mine worker, filling station attendant, fisherman, etc.
   Service worker - such as barber, waiter, etc.
5. ( ) Farm worker on one or more than one farm .
6. ( ) Semi-Skilled worker - such as factory machine operator, bus or cab driver, meat cutter, etc
7. ( ) Skilled Worker - such as baker, carpenter, electrician, enlisted man in the armed services, plumber, plasterer, tailor, foreman in a factory, etc.
8. ( ) Professional - such as accountant, artist, clergyman, dentist, doctor, librarian, engineer, scientist, social worker, etc.
9. ( ) Don't know

11. How far did your father go in school?

1. ( ) None, or some grade school
2. ( ) Completed grade school
3. ( ) Completed junior high school
4. ( ) Some high school
5. ( ) Graduated from high school
6. ( ) Some college
7. ( ) Graduated from a 4 year college
8. ( ) Graduate or Professional school
9. ( ) Don't know

12. How far did your mother go in school?

1. ( ) None, or some grade school
2. ( ) Completed grade school
3. ( ) Completed junior high school
4. ( ) Some high school
5. ( ) Graduated from high school
6. ( ) Some college
7. ( ) Graduated from a 4 year college
8. ( ) Graduate or Professional school
9. ( ) Don't know

13. Does your mother have a job outside your home?
1. ( ) Full time
2. ( ) Part time
3. ( ) No

14. Approximately what is your family's yearly income?
1. ( ) Under $1,000
2. ( ) $1,000 - 2,999
3. ( ) 3,000 - 4,999
4. ( ) 5,000 - 6,999
5. ( ) 7,000 - 8,999
6. ( ) 9,000 - 11,999
7. ( ) 12,000 - 14,999
8. ( ) 15,000 - 24,999
9. ( ) 25,000 - or more
0. ( ) Don't know

15. What is the major source of your family's income?
1. ( ) Father's occupation
2. ( ) Mother's occupation
3. ( ) Other relative's occupation
4. ( ) Gifts and insurance
5. ( ) Welfare
6. ( ) Don't know

16. Generally speaking, would you say that your school attendance was
1. ( ) Very regular
2. ( ) Fairly regular
3. ( ) Fairly irregular
4. ( ) Very irregular

17. Generally, when your father makes decisions which concern you or when he makes rules for you to follow, does he explain to you the reasons for the decisions or rules?
1. ( ) He almost never explains his decisions or rules to me
2. ( ) He once in a while explains his decisions or rules to me
3. ( ) He sometimes explains his decisions or rules to me
4. ( ) He usually explains his decisions or rules to me
5. ( ) He almost always explains his decisions or rules to me

18. During the past few years or so, has your father wanted you to continue your education through high school or even beyond?
1. ( ) Yes, he has stressed it a lot
2. ( ) Yes, he has stressed it somewhat
3. ( ) Yes, but he has seldom mentioned it
4. ( ) He hasn't said one way or the other
5. ( ) No, he would rather I not continue my education

19. Generally, when your mother makes decisions which concern you or when she makes rules for you to follow, does she explain to you the reasons for the decisions or rules?
   1. ( ) She almost always explains her decisions or rules to me
   2. ( ) She usually explains her decisions or rules to me
   3. ( ) She sometimes explains her decisions or rules to me
   4. ( ) She once in a while explains her decisions or rules to me
   5. ( ) She almost never explains her decisions or rules to me

20. During the past few years or so, has your mother wanted you to continue your education through high school or even beyond it?
   1. ( ) Yes, she has stressed it a lot
   2. ( ) Yes, she has stressed it somewhat
   3. ( ) Yes, but she has seldom mentioned it
   4. ( ) She hasn't said one way or the other
   5. ( ) No, she would rather I not continue my education

21. Did you go to kindergarten before you started the first grade?
   1. ( ) Yes
   2. ( ) No

22. If we said that a close friend is a person who really accepts you, a person with whom you like to discuss things, and a person whom you enjoy being with; would you say that you had a friend among any of the teachers or staff at the school you last attended?
   1. ( ) Yes
   2. ( ) No

23. How many close friends do you have among the students at school?
   1. ( ) None
   2. ( ) One
   3. ( ) Two
   4. ( ) Three
   5. ( ) Four
   6. ( ) Five or more

24. How many of your close friends are white (anglo)?
   1. ( ) None
   2. ( ) Less than half
   3. ( ) About half
   4. ( ) More than half
   5. ( ) All

25. If you could have anyone you wanted for your close friends, how many of them would be white (anglo)?
   1. ( ) None
   2. ( ) Less than half
   3. ( ) About half
   4. ( ) More than half
   5. ( ) All

26. If you could be in the school you wanted, how many of the students would you want to be white (anglo)?
   1. ( ) None
   2. ( ) Less than half
   3. ( ) About half
   4. ( ) More than half
   5. ( ) All

27. If you could be in the school you wanted, how many teachers would you want to be white (anglo)?
   1. ( ) None
   2. ( ) Less than half
   3. ( ) About half
   4. ( ) More than half
   5. ( ) All

28. How bright do you think you are in comparison with those students in your grade?
   1. ( ) About the brightest
   2. ( ) Above average
   3. ( ) Average
   4. ( ) Below average
   5. ( ) Among the lowest

29. How many times did you talk to a guidance counselor last year?
   1. ( ) Never
   2. ( ) Once
   3. ( ) Two or three times
   4. ( ) Four or five times
   5. ( ) Six or more times
   6. ( ) We have no guidance counselor

30. How helpful was the counselor?
   1. ( ) Sympathetic and helpful
   2. ( ) Understanding but not too helpful
   3. ( ) Not helpful
   4. ( ) Hostile
   5. ( ) Did not see a counselor

31. Which one of the following list of persons has been the most influential in your life?
   1. ( ) Parents
   2. ( ) Relatives
   3. ( ) Friends
   4. ( ) Teachers
   5. ( ) Clergy
   6. ( ) Counselors
   7. ( ) Other ____________________

32. Do you have a part-time job?
   1. ( ) Yes
   2. ( ) No

33. If you do have a job, how many hours per week do you work?
   1. ( ) Do not have a job
   2. ( ) Under 5 hours
   3. ( ) 5-10 hours
   4. ( ) 10-15 hours
   5. ( ) 15-20 hours
   6. ( ) 20-40 hours
   7. ( ) Over 40 hours

34. I feel that I am recognized as an individual in school.
   1. ( ) Strongly agree
   2. ( ) Agree
   3. ( ) Disagree
   4. ( ) Strongly disagree

35. I usually tend to get along well with my fellow students.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

36. I feel that my teachers at school are fairly interested in me as a person.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

37. I realize that I am a person with little racial prejudice.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

38. Generally speaking, integration among racial and ethnic groups is a good thing.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

39. I am in favor of bussing students to other than their neighborhood school to achieve school desegregation.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

40. I feel that the curriculum and courses in my school are not relevant to my interests.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

41. Education tends to make a person more unhappy than happy.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

42. I feel that I am a person of worth, at least on an equal plane with others.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

43. A person should live mainly for today and let tomorrow take care of itself.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

44. In business and industry, a person without a college education can get ahead just as fast as a person with a college education.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

45. If I could change, I would be someone different from myself.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

46. People like me have a good chance of being succesful in life.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

47. People who accept their condition in life are happier than those who try to change things.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

48. I am able to do many things well.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

49. Everytime I try to get ahead, something or somebody stops me.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

50. Supposing you had the necessary abilities, grades, money, etc., how far would you really like to go in school?
    1. ( ) 9th grade
    2. ( ) 10th or 11th grade
    3. ( ) Graduate from high school
    4. ( ) Trade or technical school
    5. ( ) Two years of college
    6. ( ) Four years of college
    7. ( ) Graduate or Professional School
    8. ( ) Other ____________________
    ____

51. Considering your grades, abilities, financial resources, etc., how far do you actually expect to go in school?
1. ( ) 9th grade
2. ( ) 10th or 11th grade
3. ( ) Graduate from high school
4. ( ) Trade or technical school
5. ( ) Two years of college
6. ( ) Four years of college
7. ( ) Graduate or Professional School
8. ( ) Other ____________________

____

52. On the average, how many extra-curricular clubs and activities have you participated in this past year?

0 ( ) None
1 ( ) One
2 ( ) Two
3 ( ) Three
4 ( ) Four
5 ( ) Five
6 ( ) Six
7 ( ) Seven
8 ( ) Eight or more

THANK YOU FOR YOUR HELP.

THE WACO DROPOUT AND ACHIEVEMENT STUDY

Form B

This study is being conducted by the Research Development Foundation in several area schools. The purpose of the study is to understand some of the reasons as to why students drop out of school and why student achievement is higher in some schools than others. There are no right or wrong answers to the questionnaire. No one in the community will ever see your questionnaire or your responses. Please answer each item to the best of your ability. By reading each item carefully and by answering each item honestly, you can personally help to make this study a true reflection of school life.

INSTRUCTIONS

Most of the items in the questionnaire can be answered by placing an (x) in the parenthesis to the left of the response choice which you select as your best answer.

Sample Item

1. Which sport do you like best?
    1. ( ) Tennis
    2. (X) Football
    3. ( ) Baseball

This answer indicates this person likes football best.

1. Are you a male or female?
   1. (   ) Male
   2. (   ) Female

2. How old were you on your last birthday?
   1. (   ) 14 or younger
   2. (   ) 15
   3. (   ) 16
   4. (   ) 17
   5. (   ) 18
   6. (   ) 19
   7. (   ) 20
   8. (   ) 21 or older

3. How long have you lived in the greater Waco area?
   1. (   ) Less than one year
   2. (   ) One year
   3. (   ) Two years
   4. (   ) Three years
   5. (   ) Four years
   6. (   ) Five years
   7. (   ) Six years
   8. (   ) Seven or more years

4. Which of the following best describes you?
   1. (   ) American Indian
   2. (   ) Black
   3. (   ) Chicano
   4. (   ) Oriental
   5. (   ) White
   6. (   ) Other

5. How many brothers and sisters do you have altogether?
   1. (   ) None
   2. (   ) One
   3. (   ) Two
   4. (   ) Three
   5. (   ) Four
   6. (   ) Five
   7. (   ) Six
   8. (   ) Seven
   9. (   ) Eight or More

6. How many brothers and sisters do you have who are older than you?
   1. (   ) None
   2. (   ) One
   3. (   ) Two
   4. (   ) Three
   5. (   ) Four or More

7. Do you speak a language other than English outside of school? (Spanish, Polish, German, etc.)
   1. ( ) Yes, frequently
   2. ( ) Yes, occasionally
   3. ( ) Yes, rarely
   4. ( ) No

8. Who is now acting as your father? If you are adopted, consider your adoptive father as your real father.
   1. ( ) My real father, who is living at home
   2. ( ) My real father, who is not living at home
   3. ( ) My stepfather
   4. ( ) My foster father
   5. ( ) My grandfather
   6. ( ) Another relative (uncle, etc.)
   7. ( ) Another adult
   8. ( ) No one

9. Who is now acting as your mother? If you are adopted consider your adoptive mother as your real mother.
   1. ( ) My real mother, who is living at home
   2. ( ) My real mother, who is not living at home
   3. ( ) My stepmother
   4. ( ) My foster mother
   5. ( ) My grandmother
   6. ( ) Another relative (aunt, etc.)
   7. ( ) Another adult
   8. ( ) No one

Please answer all questions about your parents in terms of your answers to questions 8 and 9. In situations in which no one is now acting as mother or father, answer questions about your parents in terms of your real mother and father whether they are living or dead.

10. What work does your father do? You probably will not find his exact job listed, but check the one that comes closest. If he is now out of work or if he is retired, mark the one that he usually did. Mark only his main job if he works at more than one.
1. ( ) Technical - such as draftsman, surveyor, medical or dental technician,
Official - such as manufacturer, officer in a large company, banker, government official or inspector, etc.
2. ( ) Manager - such as a sales manager, store manager, office manager, factory supervisor, etc.
Proprietor or Owner - such as owner of small business, wholesale, retailer, contractor, restaurant owner, etc.
3. ( ) Clerical worker - such as bankteller, bookkeeper, sales clerk, office clerk, messenger, mail carrier, etc.
Salesman - such as real estate salesman or insurance, etc.
Protective Worker - such as policeman, detective, sheriff, fireman, et
4. ( ) Workman or Laborer - such as factory or mine worker, filling station attendant, fisherman, etc.
Service worker - such as barber, waiter, etc.
5. ( ) Farm worker on one or more than one farm
6. ( ) Semi-Skilled worker - such as factory machine operator, bus or cab driver, meat cutter, etc
7. ( ) Skilled Worker - such as baker, carpenter, electrician, enlisted man in the armed services, plumber, plasterer, tailor, foreman in a factory, etc.
8. ( ) Professional - such as accountant, artist, clergyman, dentist, doctor, librarian, engineer, scientist, social worker, etc.
9. ( ) Don't know

11. How far did your father go in school?
1. ( ) None, or some grade school
2. ( ) Completed grade school
3. ( ) Completed junior high school
4. ( ) Some high school
5. ( ) Graduated from high school
6. ( ) Some college
7. ( ) Graduated from a 4 year college
8. ( ) Graduate or Professional school
9. ( ) Don't know

12. How far did your mother go in school?
1. ( ) None, or some grade school
2. ( ) Completed grade school
3. ( ) Completed junior high school
4. ( ) Some high school
5. ( ) Graduated from high school
6. ( ) Some college
7. ( ) Graduated from a 4 year college
8. ( ) Graduate or Professional school
9. ( ) Don't know

13. Does your mother have a job outside your home?
    1. ( ) Full time
    2. ( ) Part time
    3. ( ) No

14. Approximately what is your family's yearly income?
    1. ( ) Under $1,000
    2. ( ) $1,000 - 2,999
    3. ( ) 3,000 - 4,999
    4. ( ) 5,000 - 6,999
    5. ( ) 7,000 - 8,999
    6. ( ) 9,000 - 11,999
    7. ( ) 12,000 - 14,999
    8. ( ) 15,000 - 24,999
    9. ( ) 25,000 - or more
    0. ( ) Don't know

15. What is the major source of your family's income?
    1. ( ) Father's occupation
    2. ( ) Mother's occupation
    3. ( ) Other relative's occupation
    4. ( ) Gifts and insurance
    5. ( ) Welfare
    6. ( ) Don't know

16. Generally speaking, would you say that your school attendance was
    1. ( ) Very regular
    2. ( ) Fairly regular
    3. ( ) Fairly irregular
    4. ( ) Very irregular

17. Generally, when your father makes decisions which concern you or when he makes rules for you to follow, does he explain to you the reasons for the decisions or rules?
    1. ( ) He almost never explains his decisions or rules to me
    2. ( ) He once in a while explains his decisions or rules to me
    3. ( ) He sometimes explains his decisions or rules to me
    4. ( ) He usually explains his decisions or rules to me
    5. ( ) He almost always explains his decisions or rules to me

18. During the past few years or so, has your father wanted you to continue your education through high school or even beyond?
    1. ( ) Yes, he has stressed it a lot
    2. ( ) Yes, he has stressed it somewhat
    3. ( ) Yes, but he has seldom mentioned it
    4. ( ) He hasn't said one way or the other
    5. ( ) No, he would rather I not continue my education

19. Generally, when your mother makes decisions which concern you or when she makes rules for you to follow, does she explain to you the reasons for the decisions or rules?
1. ( ) She almost always explains her decisions or rules to me
2. ( ) She usually explains her decisions or rules to me
3. ( ) She sometimes explains her decisions or rules to me
4. ( ) She once in a while explains her decisions or rules to me
5. ( ) She almost never explains her decisions or rules to me

20. During the past few years or so, has your mother wanted you to continue your education through high school or even beyond it?
1. ( ) Yes, she has stressed it a lot
2. ( ) Yes, she has stressed it somewhat
3. ( ) Yes, but she has seldom mentioned it
4. ( ) She hasn't said one way or the other
5. ( ) No, she would rather I not continue my education

21. Did you go to kindergarten before you started the first grade?
1. ( ) Yes
2. ( ) No

22. If we said that a close friend is a person who really accepts you, a person with whom you like to discuss things, and a person whom you enjoy being with; would you say that you had a friend among any of the teachers or staff at the school you last attended?
1. ( ) Yes
2. ( ) No

23. How many close friends do you have among the students at school?
1. ( ) None
2. ( ) One
3. ( ) Two
4. ( ) Three
5. ( ) Four
6. ( ) Five or more

24. How many of your close friends are white (anglo)?
1. ( ) None
2. ( ) Less than half
3. ( ) About half
4. ( ) More than half
5. ( ) All

25. If you could have anyone you wanted for your close friends, how many of them would be white (anglo)?
1. ( ) None
2. ( ) Less than half
3. ( ) About half
4. ( ) More than half
5. ( ) All

26. If you could be in the school you wanted, how many of the students would you want to be white (anglo)?
1. ( ) None
2. ( ) Less than half
3. ( ) About half
4. ( ) More than half
5. ( ) All

27. If you could be in the school you wanted, how many teachers would you want to be white (anglo)?
    1. ( ) None
    2. ( ) Less than half
    3. ( ) About half
    4. ( ) More than half
    5. ( ) All

28. How bright do you think you are in comparison with those students in your grade?
    1. ( ) About the brightest
    2. ( ) Above average
    3. ( ) Average
    4. ( ) Below average
    5. ( ) Among the lowest

29. How many times did you talk to a guidance counselor last year?
    1. ( ) Never
    2. ( ) Once
    3. ( ) Two or three times
    4. ( ) Four or five times
    5. ( ) Six or more times
    6. ( ) We have no guidance counselor

30. How helpful was the counselor?
    1. ( ) Sympathetic and helpful
    2. ( ) Understanding but not too helpful
    3. ( ) Not helpful
    4. ( ) Hostile
    5. ( ) Did not see a counselor

31. Which one of the following list of persons has been the most influential in your life?
    1. ( ) Parents
    2. ( ) Relatives
    3. ( ) Friends
    4. ( ) Teachers
    5. ( ) Clergy
    6. ( ) Counselors
    7. ( ) Other ____________________
    ____

32. Do you have a part-time job?
    1. ( ) Yes
    2. ( ) No

33. If you do have a job, how many hours per week do you work?
    1. ( ) Do not have a job
    2. ( ) Under 5 hours
    3. ( ) 5-10 hours
    4. ( ) 10-15 hours
    5. ( ) 15-20 hours
    6. ( ) 20-40 hours
    7. ( ) Over 40 hours

34. I feel that I am recognized as an individual in school.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

35. I usually tend to get along well with my fellow students.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

36. I feel that my teachers at school are fairly interested in me as a person.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

37. I realize that I am a person with little racial prejudice.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

38. Generally speaking, integration among racial and ethnic groups is a good thing.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

39. I am in favor of bussing students to other than their neighborhood school to achieve school desegregation.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

40. I feel that the curriculum and courses in my school are not relevant to my interests.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

41. Education tends to make a person more unhappy than happy.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

42. I feel that I am a person of worth, at least on an equal plane with others.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

43. A person should live mainly for today and let tomorrow take care of itself.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

44. In business and industry, a person without a college education can get ahead just as fast as a person with a college education.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

45. If I could change, I would be someone different from myself.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

46. People like me have a good chance of being succesful in life.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

47. People who accept their condition in life are happier than those who try to change things.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

48. I am able to do many things well.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

49. Everytime I try to get ahead, something or somebody stops me.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

50. Supposing you had the necessary abilities, grades, money, etc., how far would you really like to go in school?
    1. ( ) 9th grade
    2. ( ) 10th or 11th grade
    3. ( ) Graduate from high school
    4. ( ) Trade or technical school
    5. ( ) Two years of college
    6. ( ) Four years of college
    7. ( ) Graduate or Professional School
    8. ( ) Other ____________________

51. Considering your grades, abilities, financial resources, etc., how far do you actually expect to go in school?
1. ( ) 9th grade
2. ( ) 10th or 11th grade
3. ( ) Graduate from high school
4. ( ) Trade or technical school
5. ( ) Two years of college
6. ( ) Four years of college
7. ( ) Graduate or Professional School
8. ( ) Other ____________________
____

52. On the average, how many extra-curricular clubs and activities have you participated in this past year?
0 ( ) None
1 ( ) One
2 ( ) Two
3 ( ) Three
4 ( ) Four
5 ( ) Five
6 ( ) Six
7 ( ) Seven
8 ( ) Eight or more

53. In general, how do you feel about the school to which you are presently being bussed?
1. ( ) Like it better than my previous school
2. ( ) About the same as my previous school
3. ( ) Like it less than my previous school

54. What was your initial reaction to finding out you were to be bussed to your present school?
1. ( ) Positive
2. ( ) Neutral
3. ( ) Negative

55. What was your parents initial reaction to finding out you were to be bussed to your present school?
1. ( ) Positive
2. ( ) Neutral
3. ( ) Negative

56. What do you like best about being bussed?

____

____

57. What do you like least about being bussed?

____

____

THANK YOU FOR YOUR HELP.

THE WACO DROPOUT AND ACHIEVEMENT STUDY

Form C

This study is being conducted by the Research Development Foundation in several area schools. The purpose of the study is to understand some of the reasons as to why students drop out of school and why student achievement is higher in some schools than others. There are no right or wrong answers to the questionnaire. No one in the community will ever see your questionnaire or your responses. Please asnwer each item to the best of your ability. By reading each item carefully and by answering each item honestly, you can personally help to make this study a true reflection of your situation.

INSTRUCTIONS

Most of the items in the questionnaire can be answered by placing an (x) in the parenthesis to the left of the response choice which you select as your best answer.

Sample Item

1. Which sport do you like best?
    A. ( ) Tennis
    B. (X) Football
    C. ( ) Baseball

This answer indicates this person likes football best.

1. What is your sex?
    A. ( ) Male
    B. ( ) Female

2. What is your age?
    A. ( ) Under 26
    B. ( ) 26 to 35
    C. ( ) 36 to 45
    D. ( ) 46 to 55
    E. ( ) 56 to 65
    F. ( ) 65 or older

3. Are you . . .
    A. ( ) American Indian
    B. ( ) Black
    C. ( ) Chicano
    D. ( ) Oriental
    E. ( ) White
    F. ( ) Other

4. What work does (did) your father do? You probably will not find his exact job listed, but check the one that comes closest. If he is now out of work or if he is retired, mark the one that he usually did. Mark only his main job if he works as more than one.
    A. ( ) Technical - such as draftsman, surveyor, medical or dental technician, etc.
    Official - such as manufacturer, officer in a large company, banker, government official or inspector, etc.
    B. ( ) Manager - such as a sales manager, store manager, office manager, factory supervisor, etc.
    Proprietor or Owner - such as owner of small business, wholesale, retailer, contractor, restaurant owner, etc.
    C. ( ) Clerical worker - such as bankteller, bookkeeper, sales clerk, office clerk, messenger, mail carrier, etc.
    Salesman - such as real estate salesman or insurance, etc.
    Protective Worker - such as policeman, detective, sheriff, fireman, etc.
    D. ( ) Workman or Laborer - such as factory or mine worker, filling station attendant, fisherman, etc.
    Service worker - such as barber, waiter, etc.
    E. ( ) Farm worker on one or more than one farm
    F. ( ) Semi-Skilled worker - such as factory machine operator, bus or cab driver, meat cutter, etc.
    G. ( ) Skilled Worker - such as baker, carpenter, electrician, enlisted man in the armed services, plumber, plasterer, tailor, foreman in a factory, etc.
    H. ( ) Professional - such as accountant, artist, clergyman, dentist, doctor, librarian, engineer, secintist, social worker, etc.
    I. ( ) Don't know

5. How far did your father go in school?
A. ( ) None, or some grade school
B. ( ) Completed grade school
C. ( ) Completed junior high school
D. ( ) Some high school
E. ( ) Graduated from high school
F. ( ) Some college
G. ( ) Graduated from a 4 year college
H. ( ) Graduate or Professional school
I. ( ) Don't know

6. How far did your mother go in school?
A. ( ) None, or some grade school
B. ( ) Completed grade school
C. ( ) Completed junior high school
D. ( ) Some high school
E. ( ) Graduated from high school
F. ( ) Some college
G. ( ) Graduated from a 4 year college
H. ( ) Graduate or Professional school
I. ( ) Don't know

7. What is the highest earned college degree you hold? (Do not report honorary degrees)
A. ( ) No degree
B. ( ) Degree or diploma based on less than 4 years work
C. ( ) A Bachelor's degree
D. ( ) A Master's degree
E. ( ) Professional or Specialist diploma (Sixth year)
F. ( ) A Doctor's degree

8. How did you happen to be assigned to this particular school rather than some other school in this district?
A. ( ) I asked to work in this school.
B. ( ) I was placed in this school.

9. In general, what is your level of satisfaction teaching in your present position in this school?
A. ( ) Very satisfied
B. ( ) Somewhat satisfied
C. ( ) Somewhat dissatisfied
D. ( ) Very dissatisfied

10. Overall, how would you rate the academic ability level of the students in this school?
A. ( ) Excellent
B. ( ) Good
C. ( ) Average
D. ( ) Fair
E. ( ) Poor

11. Overall, how would you rate students in your school on how hard they try in school?
A. ( ) Excellent
B. ( ) Good
C. ( ) Average
D. ( ) Fair
E. ( ) Poor

12. What will be your total annual salary from this school system this year?
    A. ( ) Below $3,000
    B. ( ) $3,000 - $4,999
    C. ( ) $5,000 - $6,999
    D. ( ) $7,000 - $8,999
    E. ( ) $9,000 or more

13. If you could choose, would you be a faculty member in some other school rather than this one?
    A. ( ) Yes
    B. ( ) Perhaps
    C. ( ) No

14. If you could take your choice of school settings, which would you select from among the following?
    A. ( ) All children of professional and white collar workers
    B. ( ) Mostly children of professional and white collar workers
    C. ( ) Children from a general cross section of the community
    D. ( ) Mostly children of factory and other blue collar workers
    E. ( ) All children of factory and other blue collar workers
    F. ( ) Children of rural families
    G. ( ) No preference

15. What kind of school do you prefer to work in, as far as ethnic composition is concerned?
    A. ( ) A school with predominantly Anglo-Saxon students
    B. ( ) A school with a mixture of Anglo-Saxons and ethnic minority groups
    C. ( ) A school with predominantly minority ethnic groups
    D. ( ) No preference

16. What type of class do you most like to teach or counsel?
    A. ( ) High ability group
    B. ( ) Average ability group
    C. ( ) Low ability group
    D. ( ) Mixed ability group
    E. ( ) No preference

17. What kind of school do you prefer to work in, as far as racial composition is concerned?
    A. ( ) An all white school
    B. ( ) A mostly white school but with some nonwhite students
    C. ( ) A school with about half white and half nonwhite students
    D. ( ) A mostly nonwhite school but with some white students
    E. ( ) No preference

18. About what percentage of the students you teach or counsel this year are white?
    A. ( ) None
    B. ( ) 1 to 19%
    C. ( ) 20 to 39%
    D. ( ) 40 to 59%
    E. ( ) 60 to 79%
    F. ( ) 80 to 99%
    G. ( ) All

19. If you had to choose a single one, which of the following sources of information do you think best predicts a pupil's success or failure in school?
A. ( ) Teacher recommendation(s)
B. ( ) Group or individual intelligence or aptitude scores
C. ( ) Personality and/or vocational inventory scores
D. ( ) School Grades
E. ( ) Other

20. Which of the following policies on bussing school children represents the best educational practice in your estimation?
A. ( ) Children should not be bused to a school other than their neighborhood school
B. ( ) Children should be bused to another school but only to relieve overcrowding
C. ( ) Nonwhite children should be bused to another school in order to achieve racial balance
D. ( ) Both white and non-white children should be bused into schools with a predominantly different racial composition, to achieve racial balance.

21. What type of faculty do you believe is best for a school with an all non-white or predominantly nonwhite student body?
A. ( ) An all white faculty
B. ( ) Predominantly white faculty
C. ( ) About an equal number of white and nonwhite faculty
D. ( ) Predominantly nonwhite faculty
E. ( ) All nonwhite faculty
F. ( ) Doesn't matter
G. ( ) Selected without regard to race
H. ( ) Some degree of integration, but the ratio doesn't matter

22. What type of faculty do you believe is best for a school with a racially heterogeneous student body?
A. ( ) An all white faculty
B. ( ) Predominantly white faculty
C. ( ) About an equal number of white and nonwhite faculty
D. ( ) Predominantly nonwhite faculty
E. ( ) All nonwhite faculty
F. ( ) Doesn't matter
G. ( ) Selected without regard to race
H. ( ) Some degree of integration, but the ratio doesn't matter

23. What type of faculty do you believe is best for a school with an all white or predominantly white student body?
A. ( ) An all white faculty
B. ( ) Predominantly white faculty
C. ( ) About an equal number of white and nonwhite faculty
D. ( ) Predominantly nonwhite faculty
E. ( ) All nonwhite faculty
F. ( ) Doesn't matter
G. ( ) Selected without regard to race
H. ( ) Some degree of integration, but the ratio doesn't matter

24. Have you ever participated in a WISD Catalyst Program or one of Region XII's workshops on teaching integrated classes?
A. ( ) Yes
B. ( ) No

25. How many of your close friends are white?
A. ( ) None
B. ( ) Less than half
C. ( ) About half
D. ( ) More than half
E. ( ) All

26. How adequate are counseling and guidance services in your school?
A. ( ) Quite adequate
B. ( ) Average
C. ( ) Less than adequate

27. If I could change, I would be someone different from myself.
A. ( ) Strongly agree
B. ( ) Agree
C. ( ) Disagree
D. ( ) Strongly disagree

28. People like me have a good chance of being succesful in life.
A. ( ) Strongly agree
B. ( ) Agree
C. ( ) Disagree
D. ( ) Strongly disagree

29. People who accept their condition in life are happier than those who try to change things.
A. ( ) Strongly agree
B. ( ) Agree
C. ( ) Disagree
D. ( ) Strongly disagree

30. I am able to do many things well.
A. ( ) Strongly agree
B. ( ) Agree
C. ( ) Disagree
D. ( ) Strongly disagree

31. Everytime I try to get ahead, something or somebody stops me.
A. ( ) Strongly agree
B. ( ) Agree
C. ( ) Disagree
D. ( ) Strongly disagree

For the following questions, circle the letters which best represent your opinion.

SD Strongly disagree
D Disagree
A Agree
SA Strongly agree

32. Most whites get ahead by trying harder. SD D A SA

33. Most blacks could get ahead if they would just try harder. SD D A SA

34. Most chicanos could get ahead if they would just try harder. SD D A SA

35. Prejudice by whites is the primary reason blacks are not more succesful. SD D A SA

36. Prejudice by chicanos is the primary reason blacks are not more successful. SD D A SA

37. Prejudice by blacks is the primary reason chicanos are not more successful. SD D A SA

38. Prejudice by whites is the primary reason chicanos are not more successful. SD D A SA

39. It is more important to build for the future than to live only in the present. SD D A SA

40. Given the proper start and the proper education most persons can reach the goals they set for themselves. SD D A SA

41. If one works hard enough and keeps one's head high, one can usually get to the top. SD D A SA

42. It is better to save for an opportunity in the future than to spend money for those wishes that one might have now. SD D A SA

43. Surveys of school problems show a number of things reported by teachers as reducing the effectiveness of the school. Below is a partial list of these problems. Mark Y (yes) for those situations that constitute a problem in your school. Mark N (no) for those that do not constitute a problem in your school.

a. ( ) Poor home environments of students
b. ( ) Different races or ethnic groups don't get along together
c. ( ) Parents attempt to interfere with the school

d. ( ) There is too much competition for grades
e. ( ) There is too much teacher turnover
f. ( ) Poor instructional equipment, supplies and books
g. ( ) Parents don't take an active interest in their children's school work
h. ( ) Teachers don't seem to be able to work well together
i. ( ) Students aren't really interested in learning
j. ( ) There is a lack of effective leadership from the school administratio
k. ( ) There should be a better mixture, the students are all too much of one type
l. ( ) Too much time has to be spent on discipline

44. Please use the following space (back side of this page) to include any ideas or comments that you consider important for this study.

THANK YOU FOR YOUR COOPERATION

APPENDIX E. QUESTIONNAIRE FOR THIRD WAVE OF DATA COLLECTION, SPRING, 1973

THE WACO DROPOUT AND ACHIEVEMENT STUDY

Form D

This study is being conducted in several area schools. The purpose of the study is to understand some of the reasons as to why students drop out of school, why student achievement is higher in some schools than others, and to evaluate the use of busing to achieve racial balance in Waco schools. There are no right or wrong answers to the questionnaire. No one in the community will ever see your questionnaire or your responses. Please answer each item to the best of your ability. By reading each item carefully and by answering each item honestly, you can personally help to make this study a true reflection of student life.

INSTRUCTIONS

Most of the items in the questionnaire can be answered by placing an (X) in the parenthesis to the left of the response choice which you select as your best answer.

Sample Item

1. Which sport do you like best?

1. (   ) Tennis
2. (X) Football
3. (   ) Baseball

This answer indicates this person likes football best.

Leave numbers 1-10 blank

1. - 2.

3.

4. - 9.

10.

Begin here.

11. Are you a male or female?
 1. ( ) Male
 2. ( ) Female

12. How old were you on your last birthday?
 1. ( ) 14 or younger
 2. ( ) 15
 3. ( ) 16
 4. ( ) 17
 5. ( ) 18
 6. ( ) 19
 7. ( ) 20 or older

13. Do you have a part-time or full-time job?
 1. ( ) Yes
 2. ( ) No

14. If you do have a job, how many hours per week do you work?
 1. ( ) Do not have a job
 2. ( ) Under 5 hours
 3. ( ) 5 - 10 hours
 4. ( ) 10 - 15 hours
 5. ( ) 15 - 20 hours
 6. ( ) 20 - 40 hours
 7. ( ) Over 40 hours.

15. On the average, how many extra-curricular clubs and activities have you participated in regularly this year?
 1. ( ) None
 2. ( ) One
 3. ( ) Two
 4. ( ) Three
 5. ( ) Four
 5. ( ) Five
 6. ( ) Six
 7. ( ) Seven
 8. ( ) Eight or more

16. How long have you lived in or near Waco?
 1. ( ) Less than one year
 2. ( ) One to three years
 3. ( ) Four to six years
 4. ( ) Seven to nine years
 5. ( ) Over nine years

17. Generally speaking, in what type of neighborhood did you grow up?
   1. ( ) Segregated, all black
   2. ( ) Segregated, all white
   3. ( ) Partially Integrated
   4. ( ) Fully Integrated

18. I feel that I am recognized as an individual in school.
   1. ( ) Strongly agree
   2. ( ) Agree
   3. ( ) Disagree
   4. ( ) Strongly disagree

19. A person should live for today and let tomorrow take care of itself.
   1. ( ) Strongly agree
   2. ( ) Agree
   3. ( ) Disagree
   4. ( ) Strongly disagree

20. In business and industry, a person without a college education can get ahead just as fast as a person with a college education.
   1. ( ) Strongly agree
   2. ( ) Agree
   3. ( ) Disagree
   4. ( ) Strongly disagree

21. If I could change, I would be someone different from myself.
   1. ( ) Strongly agree
   2. ( ) Agree
   3. ( ) Disagree
   4. ( ) Strongly disagree

22. People like me don't have much of a chance to be successful in life.
   1. ( ) Strongly agree
   2. ( ) Agree
   3. ( ) Disagree
   4. ( ) Strongly disagree

23. People who accept their condition in life are happier than those who try to change things.
   1. ( ) Strongly agree
   2. ( ) Agree
   3. ( ) Disagree
   4. ( ) Strongly disagree

24. I am able to do many things well.
   1. ( ) Strongly agree
   2. ( ) Agree
   3. ( ) Disagree
   4. ( ) Strongly disagree

25. Everytime I try to get ahead, something or somebody stops me.
   1. ( ) Strongly agree
   2. ( ) Agree
   3. ( ) Disagree
   4. ( ) Strongly disagree

26. At time I think I am no good at all.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

27. I feel that I am a person of worth, at least on an equal plane with others.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

28. I usually tend to get along well with my fellow students.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

29. I feel that my teachers at school are fairly interested in me as a person.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

30. I realize that I am a person with little racial prejudice.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

31. Generally, speaking, integration among racial and ethnic groups is a good thing.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

32. I am in favor of busing students to other than their neighborhood school to achieve school desegregation.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

33. I feel that the curriculum and courses in my school are not relevant to my interests.'
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

34. Education tends to make a person more unhappy than happy.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

35. How bright do you think you are in comparison with those students in your grade?
    1. (   ) About the brightest
    2. (   ) Above average
    3. (   ) Average
    4. (   ) Below average
    5. (   ) Among the lowest

36. How many times did you talk to a guidance counselor last year?
    1. (   ) Never
    2. (   ) Once
    3. (   ) Two or three times
    4. (   ) Four or five times
    5. (   ) Six or more rimes
    6. (   ) We have no guidance counselor

37. How helpful was the counselor?
    1. (   ) Sympathetic and helpful
    2. (   ) Understanding but not too helpful
    3. (   ) Not helpful
    4. (   ) Hostile
    5. (   ) Did not see a counselor

38. Generally speaking, integration in the public schools is a good thing.
    1. (   ) Strongly agree
    2. (   ) Agree
    3. (   ) Disagree
    4. (   ) Strongly disagree

39. School integration raises the educational attainment level of minority group students.
    1. (   ) Strongly agree
    2. (   ) Agree
    3. (   ) Disagree
    4. (   ) Strongly disagree

40. School integration raises the educational attainment level of majority group students.
    1. (   ) Strongly agree
    2. (   ) Agree
    3. (   ) Disagree
    4. (   ) Strongly disagree

41. Integration of the schools is necessary in order to achieve a quality education for everyone.
    1. (   ) Strongly agree
    2. (   ) Agree
    3. (   ) Disagree
    4. (   ) Strongly disagree

42. Are you currently being bussed to the school you are presently attending?
    1. (   ) Yes
    2. (   ) No

43. Busing is the most effective way to achieve school integration.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

44. Busing risks the physical health of the students involved.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

45. Busing hinders the learning process.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

46. Black students could receive the same quality education as white students receive if the top-quality teachers were fairly distributed among the high schools: that is, if teachers were relocated rather than students.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

47. The money used for buying school buses to transfer students could be used better to upgrade substandard schools.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

48. The advantages of busing outweigh the disadvantages.
    1. ( ) Strongly agree
    2. ( ) Agree
    3. ( ) Disagree
    4. ( ) Strongly disagree

49. How do your parents feel about busing to achieve racial balance in Waco public schools?
    1. ( ) They are for it
    2. ( ) They are neutral
    3. ( ) They are against it

50. How do most of your friends feel about busing to achieve racial balance in the Waco public schools.
    1. ( ) They are for it
    2. ( ) They are neutral
    3. ( ) They are against it

51. How do you feel about busing to achieve racial balance in Waco schools?
    1. ( ) I am in favor of it
    2. ( ) I am neutral, no strong feelings one way or the other.
    3. ( ) I am against it

52. If you could be in the school you wanted, how many of the students would you want to be white?
   1. ( ) None
   2. ( ) Less than half
   3. ( ) About half
   4. ( ) More than half
   5. ( ) All

53. If you could be in the school you wanted, how many teachers would you want to be white?
   1. ( ) None
   2. ( ) Less than half
   3. ( ) About half
   4. ( ) More than half

54. Which type of the following schools do you think would benefit you most academically?
   1. ( ) Attending a predominantly white school
   2. ( ) Attending an "integrated" school
   3. ( ) Attending an all black school
   4. ( ) Doesn't make any difference

55. Generally speaking, are white or black teachers more patient with you?
   1. ( ) Black
   2. ( ) White
   3. ( ) About the same

56. Generally speaking, do black or white teachers stimulate you to think more about the subject matter?
   1. ( ) Black
   2. ( ) White
   3. ( ) About the same

57. How do your parents feel about the school you are presently attending?
   1. ( ) They like it
   2. ( ) They are neutral
   3. ( ) They dislike it

58. If you had the choice of attending any high school in Waco, which school would you prefer?
   1. ( ) Jefferson-Moore
   2. ( ) Richfield
   3. ( ) University
   4. ( ) Waco
   5. ( ) Carver (If it was not closed)
   6. ( ) LaVega

59. If it was left to your parents to choose a high school for you to attend, which school would they choose?
   1. ( ) Jefferson-Moore
   2. ( ) Richfield
   3. ( ) University
   4. ( ) Waco
   5. ( ) Carver (If it was not closed)
   6. ( ) LaVega

60. Do you have a closer association with students from your school or friends from your neighborhood?
    1. ( ) Students from school
    2. ( ) Friends from the neighborhood
    3. ( ) Both - They are the same
    4. ( ) Neither

61. If we said that a close friend is a person who really accepts you as a person, someone with whom you like to discuss things, someone whom you enjoy being with; would you say that you have many friends among the teachers at the school you are attending?
    1. ( ) Yes, I have many friends among the teachers
    2. ( ) I have a few friends among the teachers
    3. ( ) No, I do not have any friends among the teachers

62. How many close friends do you have among the students at your school?
    1. ( ) None
    2. ( ) One
    3. ( ) Two
    4. ( ) Three
    5. ( ) Four
    6. ( ) Five or more

63. How many of your close friends are white?
    1. ( ) None
    2. ( ) Less than half
    3. ( ) About half
    4. ( ) More than half
    5. ( ) All

64. If you could have anyone you wanted for close friends, how many of them would be white?
    1. ( ) None
    2. ( ) Less than half
    3. ( ) About half
    4. ( ) More than half
    5. ( ) All

65. Concerning your dating activity, about how often do you go out on dates in a month?
    1. ( ) Do not date
    2. ( ) Once or twice
    3. ( ) Three to six times
    4. ( ) Seven to ten times
    5. ( ) Eleven or more times

66. How often do you date a person of another race?
    1. ( ) Do not date
    2. ( ) I do date, but have never dated a person of another race
    3. ( ) Have once or twice
    4. ( ) Fairly regularly
    5. ( ) Often
    6. ( ) All the time

67. How long have you been dating inter-racially?
    1. ( ) Do not date persons of another race
    2. ( ) Less than one year
    3. ( ) One to two years
    4. ( ) Over two years

68. If you do date persons of another race, check as many of the following responses as apply to you.
   1. ( ) Do not date persons of another race
   2. ( ) Because most of my friends do
   3. ( ) Because none of my friends do
   4. ( ) Its the most popular thing to do
   5. ( ) Its the most unpopular thing to do
   6. ( ) No special reason - a date from one race is just the same as a date from another race
   7. ( ) Because I believe in racial integration
   8. ( ) Other ______________________________

69. If you do not date those of another race, check as many of the following responses as apply to you.
   1. ( ) Parents do not approve
   2. ( ) Friends do not approve
   3. ( ) I do not want to
   4. ( ) Do not know anyone of another race
   5. ( ) Do not date
   6. ( ) Other ______________________________

70. What do you like most about busing?

____

____

____

72. What is your objection to busing?

____

____

____

THANK YOU FOR YOUR COOPERATION

APPENDIX F. Correlation Coefficients For Selected Variables By Student Busing Status

I. Correlation Coefficients for Bused Minority Students*

	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	X_{11}
X_1	100										
X_2	19	100									
X_3	17	22	100								
X_4	04	03	06	100							
X_5	02	24	20	14	100						
X_6	01	09	-03	-01	00	100					
X_7	-06	-02	-10	-02	-06	-07	100				
X_8	14	-02	12	06	23	14	08	100			
X_9	16	06	10	09	19	-12	-04	-04	100		
X_{10}	20	18	05	09	18	-02	-29	-05	06	100	
X_{11}	25	-09	16	29	26	15	-36	-02	17	50	100
X_{12}	18	24	-04	26	12	16	-24	09	28	-02	09
X_{13}	00	-02	-07	04	-06	13	-17	-17	19	22	09
X_{14}	03	08	04	20	16	00	-17	-14	43	31	08
X_{15}	24	22	00	11	37	-12	-32	00	47	05	32
X_{16}	30	28	12	08	32	-05	-29	07	47	16	29
X_{17}	17	20	12	15	34	-02	-42	23	43	21	44
X_{18}	21	27	15	14	34	07	-39	16	50	18	38
X_{19}	22	03	07	05	11	-05	-31	06	41	18	25
X_{20}	11	10	03	07	20	04	-39	20	36	37	45
X_{21}	18	09	07	10	24	10	-42	17	51	23	40

* Decimal points omitted

X_1 = Parental Educational Encouragement

X_2 = Parental Authority Structure

X_3 = Parental Discipline and Socialization Technique

X_4 = Parental Socio-Economic Status

X_5 = Respondent's Educational Expectations

X_6 = Sex of Respondent

X_7 = Racial Prejudice Scale

X_8 = School Socio-Economic Climate

X_9 = Self-Concept Scale

X_{10} = Integration Attitude Scale

APPENDIX F. - Continued

	X_{12}	X_{13}	X_{14}	X_{15}	X_{16}	X_{17}	X_{18}	X_{19}	X_{20}	X_{21}
X_1										
X_2										
X_3										
X_4										
X_5										
X_6										
X_7										
X_8										
X_9										
X_{10}										
X_{11}										
X_{12}	100									
X_{13}	19	100								
X_{14}	23	18	100							
X_{15}	36	-06	53	100						
X_{16}	31	13	42	70	100					
X_{17}	29	13	33	75	77	100				
X_{18}	32	15	40	78	92	93	100			
X_{19}	19	16	39	48	74	55	66	100		
X_{20}	15	12	22	44	54	71	63	74	100	
X_{21}	26	20	38	68	83	84	90	86	85	100

X_{11} = Busing Attitude Scale
X_{12} = School Educational Climate
X_{13} = School Interracial Climate (Objective)
X_{14} = Respondent Perception of Interracial Climate (Subjective)
X_{15} = Measured Intelligence
X_{16} = Math Scores, 1973
X_{17} = Reading Scores, 1973
X_{18} = Battery Scores, 1973
X_{19} = Math Score Change, 1971-73
X_{20} = Reading Score Change, 1971-73
X_{21} = Battery Score Change, 1971-73

APPENDIX F. - Continued

II. Correlation Coefficients For Non-Bused Students*

	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8	X_9	X_{10}	X_{11}
X_1	100										
X_2	29	100									
X_3	05	01	100								
X_4	26	06	13	100							
X_5	31	05	14	04	100						
X_6	01	-01	00	00	-05	100					
X_7	-15	07	-06	-18	-19	-08	100				
X_8	00	07	13	15	15	-06	07	100			
X_9	06	07	24	18	16	-07	-02	07	100		
X_{10}	15	13	11	11	25	02	-06	18	35	100	
X_{11}	19	25	-04	23	13	08	-18	14	20	54	100
X_{12}	20	09	04	29	08	04	-01	13	27	-13	10
X_{13}	-06	07	06	11	13	-01	-04	-13	13	12	27
X_{14}	-07	09	26	12	44	-10	-30	-16	22	19	29
X_{15}	01	37	01	05	34	-07	-16	24	22	02	28
X_{16}	09	-06	-04	05	26	-07	-18	28	28	12	30
X_{17}	08	07	14	21	27	-10	-15	21	22	-06	11
X_{18}	08	07	11	08	31	-02	-25	25	25	02	24
X_{19}	06	-01	00	05	26	-13	-22	21	27	13	27
X_{20}	03	07	12	17	32	-14	-14	19	25	02	10
X_{21}	06	04	07	06	34	05	-25	26	25	01	21

*Decimal points omitted

APPENDIX F. - Continued

	X_{12}	X_{13}	X_{14}	X_{15}	X_{16}	X_{17}	X_{18}	X_{19}	X_{20}	X_{21}
X_1										
X_2										
X_3										
X_4										
X_5										
X_6										
X_7										
X_8										
X_9										
X_{10}										
X_{11}										
X_{12}	100									
X_{13}	32	100								
X_{14}	07	05	100							
X_{15}	06	18	10	100						
X_{16}	22	00	15	52	100					
X_{17}	05	12	12	54	64	100				
X_{18}	13	03	18	56	91	85	100			
X_{19}	21	-02	20	45	97	58	86	100		
X_{20}	14	00	19	43	60	88	77	65	100	
X_{21}	19	02	22	52	90	80	97	91	82	100